

THE
LOST
PLANET

●
DALLAS

The Lost Planet

By PAUL DALLAS



WINSTON

A SCIENCE FICTION NOVEL

The Lost Planet

By PAUL DALLAS

Jacket illustration by Alex Schomburg

WITH A SHOUT OF "Rockets a-a-away!" three young Earthmen send the untested XL-35 rocket ship screaming into space toward the lost planet of Poseida. Space doctor Bill Hudson and two friends have courageously taken off on a forbidden flight in their eagerness to help prevent a catastrophic war between Earth and Poseida.

On an earlier visit to the lost planet to do medical research, Dr. Hudson had learned to respect the intelligent but octopus-like Poseidans and had developed a lasting friendship with Kutt, the Leader's son.

When the bond of good will between the two worlds reaches the breaking point, Bill devises a startling plan to outwit the small group of unscrupulous men from both planets who are behind the monstrous scheme to wreck peaceful relations. In carrying out his counterplot, aided by Lt. Eddie Watkins and Courier Griff Hughes of Planet Earth Forces, Bill rights the universe in a truly dramatic manner.

Here is a tale full of intrigue, suspense and deeds of daring spacemen. It explores the realms of medicine and science in outer space and reveals some fascinating probabilities. More than this, however, the story conveys to the reader an underlying theme intended to promote wisdom, fellowship and friendship among worlds and their peoples.

THE JOHN C. WINSTON COMPANY

Philadelphia and Toronto

0120

The Author

PAUL DALLAS was born in Plymouth, England, and now lives in the United States. Before settling down in a small town in New York State to write his first science fiction novel, he worked at many careers in several countries. After schooling in England, France, Malta and the United States, he was employed variously as a lumberjack, civil engineer, hotel clerk, driving instructor, salesman and window displayman. The unusual experiences resulting from such a diverse background equipped Mr. Dallas with much material for writing adventure stories.

The author says he wrote *THE LOST PLANET* because: "A love of the sea, kindled in many a youthful breast by the highly imaginative salty yarns related by seamen of the 15th century, contributed to the discovery of the New World; today's young minds must be helped to chart a course toward the New Worlds of outer space."

The Editors

CECILE MATSCHAT, editor of the Winston Science Fiction series, is recognized as one of this country's most skillful writers and editors. She has sixteen books to her credit, including the highly praised *Suzanne Rier* in the "Rivers of America" series. Nationally known as a lecturer, an artist of great ability, Cecile Matschat is also an expert historian. With this varied background, she is perfectly suited to select top science fiction authors and books to make this a balanced and well-rounded series.

CARL CARMER, consulting editor, holds an outstanding position in the literary world. Author of *Stars Fell on Alabama*, he now edits the popular "Rivers of America" series. Other of his books are *Genesee Fever*, *Listen for a Lonesome Drum*, and *Windfall Fiddle*.

If You Want the Best in Science Fiction,

look for books with this distinctive herald

Twenty-nine unique books by leading science fiction
writers and well-known scientists . . .



X **THE SECRET OF THE MARTIAN MOONS—**
by Donald A. Wollheim

X **STEP TO THE STARS—**by Lester del Rey

X **THE WORLD AT BAY—**by Paul Capon

X **THE SECRET OF SATURN'S RINGS—**by
Donald A. Wollheim

X **ROCKETS TO NOWHERE—**by Philip St.
John

X **TROUBLE ON TITAN—**by Alan E.
Nourse

X **THE STAR SEEKERS—**by Milton Lesser

X **MISSING MEN OF SATURN—**by Philip
Latham

X **PLANET OF LIGHT—**by Raymond Jones

X **DANGER! DINOSAURS! —** by Richard
Marsten

X **ATTACK FROM ATLANTIS—**by Lester del
Rey

X **VANDALS OF THE VOID—**by Jack Vance

X **ROCKET TO LUNA—**by Richard Marsten

X **BATTLE ON MERCURY —** by Erik Van
Lbin

X **MYSTERY OF THE THIRD MINE—**by
Robert W. Lowndes

X **MISSION TO THE MOON—**by Lester
del Rey

X **THE ANT MEN—**by Eric North

X **THE MYSTERIOUS PLANET—**by Kenneth
Wright

X **MISTS OF DAWN—**by Chad Oliver

X **ROCKET JOCKEY—**by Philip St. John

X **VAULT OF THE AGES—**by Paul Anderson

X **ISLANDS IN THE SKY —** by Arthur C.
Clarke

X **SONS OF THE OCEAN DEEPS—**by Bryce
Walton

X **EARTHBOUND—**by Milton Lesser

X **SON OF THE STARS—**by Raymond Jones

X **FIND THE FEATHERED SERPENT—**by
Evan Hunter

X **FIVE AGAINST VENUS —** by Philip
Latham

X **MARCOONED ON MARS—**by Lester del
Rey

A Science Fiction Special

X **THE YEAR AFTER TOMORROW—**An Anthology of Science Fiction Stories—edited
by Lester del Rey, Carl Canner and Cecile Matschat. Illustrated by Mel Hunter.

THE JOHN C. WINSTON COMPANY

Philadelphia and Toronto

**THE
LOST
PLANET**



DALLAS



WINSTON



The Lost Planet

A Science Fiction Novel

*The Lost
Planet*

By PAUL V. DALLAS

**Jacket and Endpaper Designs
by Alex Schomburg**



Cecile Matschat, Editor

Carl Carmer, Consulting Editor

THE JOHN C. WINSTON COMPANY

Philadelphia • Toronto

© 1956 by
PAUL V. DALLAS

FIRST EDITION

Made in the United States of America

L. C. Card #58-8416

To

PAUL V. MIFSUD, JR.

The Most Valuable Cargo

WE KNOW so much more today than those who came before us that you could make even the wisest of them gasp with the wonders that are commonplace to us. Archimedes would marvel at our mechanical calculators; Galileo would stare in disbelief at our photographic telescopes; and Pasteur would be overwhelmed by penicillin. Show Julius Caesar a tank, or Sir Francis Drake a modern battleship, and you could easily convince them that you were a god from some other world. Yet, without these great men, we would have none of the marvels in which we take such pride. Those who come after us will, no doubt, look at us with some amusement and declare, "I wonder what people did weekends before they could leave Planet Earth. Life must have been very boring."

Of course it wasn't boring, because we were planning the takeoff into space. If we hadn't thought about it and planned it, people wouldn't be spending their weekends on distant planets.

In thinking and planning space travel, we are guided by the knowledge carefully gathered and

stored by all men from the beginning of time, but then we must dart forward and add something new to this knowledge, for if we did not dare to leap ahead with our minds, we would remain earthbound forever.

If we could gather all the scientists who were alive two hundred years ago into one large room and all today's scientists into another, we could perform an interesting experiment. We would first enter the room with the scientists of two hundred years ago and ask the men assembled there only one question. "Gentlemen," we would ask, "will the atom ever be split?" Then we would enter the room filled with the scientists of today and ask one question there. "Gentlemen, will man ever travel at the speed of light?"

The chances are that we would receive much the same answer from both groups. The majority would give a resounding "No!" Some would set busily about proving that it could never be done. A few would say something like this: "It certainly can't be done today, and everything we know now seems to point to the fact that it can never be done. But it seems foolish, in the light of what we have already accomplished, really to believe that anything is impossible."

So we live, you might say, in a room whose walls are our imagination. If we have a very limited imagination, our room is a small one; if our imagination soars to the farthest reaches, and beyond, our room becomes as large as all creation.

What the mind of man can imagine, it has been said, man can do. This is proved by the fact that

reality never lags very far behind the mere idea. When man imagined flying like a bird, he built the airplane. When he conceived the idea of swimming like a fish rather than just floating like a log, he built the submarine. Now man is gazing at the skies and imagining soaring through space like a comet. Can we believe that this reality is very far away?

Most astronomical authorities believe that the first man to set foot on the Moon has already been born. Who is he? We cannot, of course, tell you exactly who he is and call him by name, but there are two things about him of which we can be relatively sure: he is young; he has vision and imagination.

In envisioning flight into space, then, we should be guided by, but not necessarily limited to, certain principles. Following that line of reasoning let us try to answer that question, "Will man ever travel at the speed of light, 186,284 miles per second?" It is, of course, a question that cannot be answered by a flat yes or no. But since man is continuously moving forward, is it not difficult to believe that some speed, short of instantaneous transference, will someday be reached where man will stop short and say, "Well, that's it; I'm not going to try to go any faster"? Let our imaginations take it from there, guided by principles established by no less an authority than the late Dr. Albert Einstein in his theory of relativity.

As we approach half the speed of light, Dr. Einstein tells us, time starts to play tricks. It seems to stretch. It stretches only for the people or objects traveling at this speed, so that if you spent one minute by your

watch traveling at half the speed of light, the people you left behind would have seen more than a minute recorded on their watches.

This stretching of time increases as your speed increases, so if you spent an hour, by your watch, traveling at 182,000 miles per second, almost five and a half hours would have elapsed on Earth! There would have been nothing wrong with your watch, because when you got back, supposing you had spent one hour away traveling at this speed, you would actually be just one hour older, while everybody you left behind would be almost five and a half hours older. You can imagine what effect this would have if you stayed up at that speed for a year or two! If you increased your speed a little, to the exact speed of light, time would stand still for you so that you would return no older than you were when you left.

Since this little trick played by time at high speeds is not in the realm of mere imagination but rather in the field of pure science, you can see how you have to let your imagination go just to catch up with what is already known—yet much remains to be explored. The entire universe and the galaxies beyond are awaiting your arrival and the arrival of others like you. As time is measured in relation to the vast reaches of space, it is now just a few minutes to take-off time; you are ready, with finger poised, to press the button that will send your ship screaming into space. Before you press that button, let us take a little time out for a short thought.

When you get to some different planet, what will

you have brought with you? Food and clothing and advanced scientific equipment, as well as everyday wonders, such as the flashlight and the movie camera, of course; but will you also bring greed and suspicion? Or will you bring wisdom and friendship? Think of this for a minute, because one thing you can be sure of: fair play and friendship can never be advanced by scientific development. You alone control this, and your state of mind may be the most valuable cargo you carry into space.

Now let us look into the future, thrilled by the thought that the first man ever to reach the Moon may be reading this book right now.

P. V. D.

Contents

CHAPTER	PAGE
<i>The Most Valuable Cargo</i>	vii
1. <i>A Memorable Christmas</i>	1
2. <i>Takeoff for Poseida</i>	16
3. <i>100,000 Miles a Second</i>	25
4. <i>The Encounter with Kutt</i>	35
5. <i>Bill Hudson, Diplomat</i>	49
6. <i>Poseidan Hospitality</i>	57
7. <i>The Tower of Life</i>	66
8. <i>Compound 5083</i>	79
9. <i>An Unexpected Trip</i>	93
10. <i>The Automatic Sentry</i>	106
11. <i>Crisis at the Concourse</i>	119
12. <i>A Momentous Decision</i>	132
13. <i>Thirty Seconds To Go!</i>	147
14. <i>The Missing Pill</i>	161
15. <i>Through the Light Barrier</i>	176
16. <i>A Verdict of Treason</i>	189
17. <i>A Post on Poseida</i>	202

Chapter 1 A Memorable Christmas

THE LONG, leisurely Christmas dinner was over. There was a momentary silence. Bill Hudson, feeling pleasantly stuffed with good food, looked across the table at his best friend, Eddie Watkins. He winked and placed his hand over his stomach, holding it a few inches away to indicate the size that he felt he should be after such a superb meal. At the head of the table, General Watkins, Eddie's father, placed his napkin on the table and regarded the two boys with an amused expression.

"Well, I daresay neither of you is in much danger of starving within the next few hours," he smiled.

"No, sir," Bill answered. "The way I feel, I don't think I'll need another mouthful of food all year."

"I won't cither," Eddie chimed in, forgetting his training and slouching a little in his chair. "From now on, food and I are no longer on speaking terms. It can ignore me and I will ignore it."

"Hah!" snorted his father. "Within a few hours, unless I miss my guess, both of you will be infiltrating

the pantry line with a view to carrying out a flank attack on the remnants of that noble turkey."

"As a matter of fact, sir, you're probably right," Bill said. "I was speaking from a feeling of fullness, but if you were to judge my caloric intake in the light of my basic metabolism and the probable expenditure of energy . . ."

Eddie sighed and raised his hands in a mock gesture of despair. "Once a doctor, always a doctor," he intoned, "but since you don't graduate for another six months, we don't have to take your word for it, and I maintain that I shall never eat again."

The three of them laughed. Then the general, turning serious, said, "Bill, I've been meaning to discuss your studies with you. You see, Eddie and I had cooked up a little surprise for you. You'll be graduating in a few months, and I understand that you will continue studying in order to specialize in space medicine. Isn't that right?"

"Yes, it is," Bill answered. "I believe the science of space medicine is becoming more important every day."

"I agree," General Watkins said. "I agree completely. Not only because it is important to the people who are traveling through the cosmos in ever-increasing numbers but," here the general looked very serious and his voice took on an earnest quality, "in the event that we should be placed in the position of having to defend our planet against an aggression from space . . . well, in that event, your profession would be vital as well as important."

As he spoke, the general seemed to become pre-occupied with thoughts of the military situation, and he absently deployed salt and pepper shakers with knives and forks on the table, setting up in front of him an imaginary military problem in the field. "It is a basic truism," he continued, "that wherever possible the best defense is a good offense. Now if we are attacked," and he brought a piece of silverware in toward the plate that was obviously representing Planet Earth, "not only do we defend the point under immediate attack but," and here several pieces were quickly moved from the plate Earth to the butter dish from which the attack had originated, "we immediately counterattack at the source of the aggression. After all, if you cut off the head, you have no need to fear the arms."

The two boys were following his every word intently although they knew that the general was not talking to them directly. He was, it seemed, thinking aloud. Suddenly he snapped out of his absorption and turned again to Bill. "To get back to what I was saying, Bill, Eddie and I had discussed a Christmas present for you. But now . . . well," the general spread his hands and shrugged sadly, "the tension that has developed between Poseida and Earth has reached a point where it is not safe to . . ."

"Why, General," Bill said with a smile, "this Christmas dinner is the best present I could get. And having me stay here for the whole two weeks of vacation—you've made me feel like I was part of the family. So please don't even mention a present."

"I'm glad you feel like one of the family," General Watkins replied, "because throughout the years, watching you and Eddie grow up, I've always been glad you two remained such fast friends. You've been like brothers to each other—and as time goes on you'll see that friendships like this are the most important thing that can happen to anyone.

"The present about which I was talking was not a gift in the ordinary sense of the word. I had planned something for after your graduation this summer. You'll have a ninety-day leave before you resume your work, and I had thought that if you spent it on Poseida, you could gain some firsthand experience of life other than on this planet. It would be of great benefit to you in your studies."

"Poseida!" Bill broke in excitedly. "How terrific! That's practically all I've been studying about this term. Since it's the only other planet on which intelligent life has been found, it's extremely important to space-medicine studies, you know. But studying from a book and actually going there and seeing for myself are two different things! When I tell Professor Mereer . . ."

"Now hold on, Bill . . . remember," the general interrupted the excited boy, "I said I *had* planned. As you know, I was stationed on Poseida for several years. I know the planet well and I have very good connections among the Poseidans. I am well aware of what a trip there would do for you, which is why I was going to arrange to have you spend your vacation there. Unfortunately the situation is worsening at an

alarming rate. Our relations with the Poseidans are deteriorating and I don't want to send you into an area of danger so far from Earth."

"I don't believe there's any danger," Bill said. "To begin with, nothing has happened between our planet and the Poseidans except a lot of talk. I've kept up with the news, and even though everybody says things are getting bad between us I don't see why. They haven't done anything to us and we haven't done anything to them. We've neither one of us even threatened the other, so I can't see where things are getting so bad except that some people *say* they're getting bad."

"I admire your spirit, son," the older man said, shaking his head, "but there is much that you are in no position to know. I'll admit no concrete incident has been proved against the Poseidans; on the other hand, our relations are definitely becoming more and more strained, and under such conditions a very real danger exists.

"If you were on Poseida through my efforts, and war should break out," he closed his hand, making a quick fist, "you would never have a chance—and I would never forgive myself. No, Bill, I'm afraid the trip will have to be postponed. Maybe in a year or two matters will straighten themselves out and then we shall see."

It was obvious that no argument was going to prevail with Bill. This was an opportunity he hadn't even dared to dream about, and, once a trip into space had been waved under his nose, he wasn't going to be

put off by the threat of a little thing like a spacial war. Of course, if Eddie's father definitely refused to go through with his original plans, nothing could be done, but Bill wasn't going to concede that the general couldn't be talked into it, without trying.

A mere torrent of words would never work with the military man, so Bill decided to use logic. He shot Eddie a quick glance which pleaded for support and then turned to the general.

"General, there is no way in which I can thank you for all you have done for me, and I know you're doing what you think is best for me when you say you're canceling your plans to send me to Poseida, but . . ." His voice trailed off as he stood up and gripped the back of his chair. "Let me show you how I look at it. First of all, if war should break out between now and June, the whole question would be settled, wouldn't it? I would be a part of the Medical Corps and subject to the orders of the Military Department, right?"

General Watkins gave Bill his full attention; he liked the way the boy stuck to his guns and he liked the way he presented his case. Strict logic was the military way. It was the way he had been trained and the way he had taught Eddie. Now Bill seemed to be offering pure logic to support his argument. The general settled back, his elbows resting on the arms of the chair. His wise brown eyes fixed themselves on the excited blue ones of the earnest young man standing across the table. "That is correct, of course," he said evenly.

"Next," Bill continued, "if war should not break out within three months after the start of June, there's no question about my safety, right? Even if I go to Poseida, I would be back before war started, wouldn't I?"

"That also is correct," intoned the general. He couldn't quite see what point Bill was leading up to and he was curious to learn how these innocent little statements would prove or disprove his case.

"Well, then," said Bill, and by the triumphant look on his face, both Eddie and his father knew that the conclusion was about to be delivered, "it follows that the only situation which worries you is that war might break out between Poseida and Earth within the ninety days immediately following next June the first!"

General Watkins was disappointed. He had expected a stronger argument. Although he in no way wanted to place Bill in jeopardy, he had half-hoped that the young medical student could convince him that his fears were exaggerated. Instead, all Bill had done was to state three quite obvious facts which not only did not change the situation but which were, indeed, the very basis for reconsidering the original plan. "Naturally, that is the situation which worries me. Since it is entirely possible a war *will* begin within that period, it would be foolhardy for me to place you where there would be no possibility of survival."

"Ah, but, General, look at the other side." Bill smiled a little slyly. "It is certain I would be involved in any case. Having specialized in space medicine, I would probably be assigned to any of our troops

involved in an attack through space. So I would wind up in very much the same position with one big difference: my first excursion into space would then be under combat conditions, with no previous experience. At least if I had some experience, no matter how little, my chances for survival would be that much greater. Remember, my field is medicine. Even if I were captured at the outset, I would probably be of great help to any of our men taken prisoner."

General Watkins smiled. "My boy, you're in the wrong profession. You should have taken up law. Yessir, you'd make a good lawyer. As a matter of fact, there is a lot in what you say." He rubbed his chin speculatively and stared at the tablecloth in front of him. "There is no question but that if you are to be involved in spacial conflict, experience gained from travel and conditions in outer space would be invaluable . . . and yet . . ."

Eddie answered Bill's silent plea by chiming in, "He's right, Dad; when you look at it that way, it's just the three months he would actually be on Poseida which would be dangerous. Anytime after that, if anything should happen, he'd be in a much better position. He'd know what he was up against. He'd probably get quick promotion on the basis of his experience. If there were no war, his postgraduate work would be helped."

Eddie's father was faced with a decision. These two boys would keep hammering away at him, each supporting and adding to the other's argument, until he handed down a ruling. He had been trained to make

decisions, and in time of combat his decisions would mean the certain death of many men. A good decision would keep casualties to a minimum, but calculated risks were a part of his job. The decision he now had to make risked only one life—but it was one that was important to his son and to him. He cleared his throat and looked up to see both boys giving him their undivided attention. He could see Bill was hardly breathing, he was so anxious to hear the decision.

"Bill, you know how I feel about you, and you know what Eddie thinks of you. Since you're so anxious to go and Eddie agrees with you, I won't stand in your way."

"Yippee!" Bill burst out. Then, regaining a small amount of control, "Thank you, General. I just know everything is going to be . . . to be . . . well just wonderful. I can't express it, but when I think of actually studying on Poseida, seeing it with my own eyes, and talking with their doctors and medical students, it's more than I can tell you."

"Don't try," said the general. He pushed his chair back and stood up. Eddie did the same, and the three of them walked into the living room. General Watkins faced both boys and put a hand on their shoulders.

"I'll make all the necessary arrangements, Bill," he promised. "You'll be staying with Major Keller—he's the senior medical officer at Earth Colony there and an old friend of mine. Your trip will be strictly unofficial but you will travel as a military dependent so that your clearance will be in order."

"Thanks for doing it, Dad," Eddie said. "I'm just as

happy as Bill is, only," his face clouded and assumed a disappointed expression, "only I wish I had a good reason to go on a space flight."

"You'll get your chance, son," his father told him. "As an officer in the Planet Earth Forces, you will do a tour of duty on Poseida."

"I know, but when I graduate I'll be a cadet for a year, and it may be several years after that before I get a chance really to travel. Oh, well, at least I can get firsthand reports from Bill." He turned to his friend. "If you don't write every week and tell me all about Poseida, I'll send a special person-to-person destruction missile tuned just to you."

"Don't worry, I'll keep in constant touch with you. I hope you both understand how grateful I feel," Bill replied.

"There, there," said the general, "don't say another word; it's all settled. You graduate on June first and that afternoon you will take off for Poseida. When the details are all arranged, I'll see that you are notified. Now you boys will have to excuse me. There are some papers waiting in the study that don't consider even Christmas Day a holiday." With that he turned and strode from the room.

Bill lay on top of his bed in the room he shared with Eddie. He was already wearing his pajamas, and he watched as his friend hung up the smart blue uniform with the gold P/E (for Planet Earth) patch at the shoulder. It was the last night of their Christmas vacation. Tomorrow he would be heading back to medical

school for five months of intensive study. For the first time in his life he didn't feel at all sorry to see vacation come to an end. Each new day that went by brought him one day closer to his trip to Poseida. He told himself that when he got back to school he would not allow himself even to think about it, because the very idea that he would soon be hurtling through the vast empty regions around Earth to land on Poseida could make him dizzy. He would study and keep his mind strictly on his work. Time would slip by faster and the looked-for day would arrive sooner.

Eddie had washed his hands and face and had put on his pajamas. He sat on the edge of his bed, separated from Bill's by the night table that stood between the beds. "Bill," he started hesitantly, "I know how anxious you are to go to Poseida, and don't think I wouldn't like to be going myself . . . but do you think it's wise? I'd hate to have anything happen to you."

Bill knew that his friend spoke, not because he thought he could change Bill's mind, but because he felt a genuine concern. Bill was touched. "Nothing's going to happen," he said. "You know . . . I've never been convinced that the Poseidans have any designs on us. I don't see what they could hope to gain by starting trouble."

"I don't know what their aims are," Eddie answered, "but all the same, a lot of very funny things are going on. Frankly I just wish they would start something." He stood up and pounded his fist into his hand. He walked over and stood at the foot of Bill's

bed, looking down at him. He seemed to grow angry. "I'm getting tired of not knowing whether we're supposed to treat them as friends, shoot them on sight, or stay on this seesaw. I'd just as soon they did make a move, so we could blast them and get it over with. I never did fully trust those Poseidan creatures. How can you warm up to an octopus with six legs that talks like a person?"

"Poseidans are not octopuses, as you call them. They look like them, it's true, but they're every bit as intelligent as we are. As far as I'm concerned, I don't care much what sort of body the mind is housed in, if it's a good mind."

"Yes, but if that mind is planning your destruction . . ."

"That hasn't been proved yet," Bill interrupted.

"Well it's been pretty nearly proved. After all, the heads of the Government of Planet Earth must know things we don't know, and they're quite jittery about *something*, so they must have made up their minds."

"Exactly what I mean," Bill returned. "If they had made up their minds, we'd be at war right now. Since they haven't decided, even with all their inside knowledge, how can you say you *know* the Poseidans plan to destroy us? Anyway, I intend to find out all I can while I'm there. I wouldn't miss this opportunity for anything."

"I can see nothing's going to stop you, and I guess you know how much I envy you. Of course I'm looking forward to spending my vacation at Military Headquarters with my father. It will be interesting,

meeting all the brass and seeing how they operate—but I sure would like to travel into space. Think of it, Bill, four *billion* miles away. A completely different planet. And you're going there and see how they live. Oh, well, I'll probably have to come and rescue you."

"If it ever comes to that," Bill said with a smile, "don't forget to bring your father along. Somehow I'd feel a little safer if General Watkins were directing my rescue."

"Hah!" snorted Eddie. "Think I couldn't lead a rescue squad myself? Why, in our final field tests, I thought up and executed a maneuver that caught the 'enemy' colonel flatfooted. You know what he said? He said Dad would have been proud of me!"

"I'm sure he would, Eddie, and I'll bet you take his place someday," Bill said. Then, the excitement mounting within him, he gazed out the window into the distance. "You know, it doesn't seem possible. As soon as this term is over I'll be way out in space, zooming through the heavens at a hundred thousand miles a second. In a way I wish I could travel on a military ship—it would be more exciting, and faster, too. But believe me, I'd fly there in a washtub if I had to."

"You ought to be glad you're not asked to go on the XL-33, the way the Poseidans have been destroying all the XL models," said Eddie.

"We don't know for sure the Poseidans are doing anything to them," Bill broke in.

"I know, I know, Doctor," Eddie said, sarcasm heavy in his voice, "but when the first thirty-two ships

in a row simply disappear in flight without a trace, and with no word of danger from the pilots who were the best men we had—I figure you can't call it mechanical failure or pilot error."

"Anyway, I'm not traveling by anything faster than regular passenger service, and I can hardly wait."

Bill got to his feet and stood up next to Eddie. He knew he must avoid thinking too much about the trip or he would never be able to sleep, nor would he be able to get through the next few months. He said to Eddie, "I've simply got to stop thinking about it, old boy, so just let me say thank you once more, and now let's get to bed. We both have a rough day ahead of us tomorrow."

He crossed the room and took a drink of ice water from the pitcher on the dresser. As he started back, Eddie sat down on the edge of his bed and began to take off his slippers. His movements were deliberate, and it appeared to Bill that there was something on his mind. He placed his slippers elaborately on the floor, making them line up exactly, then adjusting them.

Finally he looked up. "Bill," he said, "I want to ask you something."

"Sure thing, what is it?"

Eddie hesitated. "Bill," he started again, "about the Promise. You remember, two years ago. Do you feel it still holds? I mean with us graduating soon, and you going away, do you figure it's still in effect?"

Bill looked squarely into Eddie's eyes and said seriously, "Like we said then, Ed, 'for as long as we

live.' For my part, that's how I felt then and that's how I feel now. I know I'm going to meet a whole bunch of fellows, some of them great guys, no doubt—and so will you—but none of them will have shared these years with either of us, and our bond will last."

Eddie burst into a friendly grin and punched Bill on the arm. "I knew you'd feel that way, but I just wanted to hear you say it, you refugee from Mother Earth."

"So I said it. Now let's hit the sack while we can still get eight hours of shuteye." Bill tossed himself into his bed and scrambled under the covers. He reached out and turned out the light on the night table. "Good night, General," he called.

"Good night, Doctor," came the answer.

The room settled into silence, and in the minds of their respective occupants the beds became transformed into a mighty crushall tank and a sleek space craft.

Chapter 2 Takeoff for Poseida

BILL HUDSON arrived at the spaceport with about forty-five minutes to spare. He checked in with Departures and had his papers cleared and baggage checked; then, still having a half hour to kill before boarding time, he made his way to the observation deck skirting the port.

It was gigantic, stretching as far as the eye could see, a huge wheel within whose circumference all contact with outer space was made. Just inside the rim the ground was divided into lots neatly laid out and adjoining each other. From his position on the observation deck, it seemed to Bill as if spokes had been started within the giant wheel, and had been stopped about a third of the way to the center. Each of the lots formed by these spokes contained a takeoff tower, hangars, and tractor-cranes to haul the ships into place, and each was manned by its own ground crew. A ship could be completely rebuilt in any one of the machine shops which stood in every lot. Space travel was precision work, and no money or labor was spared

to insure the safety of each flight. Indeed, so thoroughly were the ships overhauled between trips, that each one as it took off was practically new.

The vast, empty space in the center of the port was reserved for landings. As a craft came in, its tail rockets belching gases to slow the descent, tractor-cranes and limousines would race out from the proper lot. The cranes would gently ease the large hull into place on its cradle, and the passengers would disembark, to be whisked to Arrivals for clearance.

This was man's gateway to infinity, Bill thought, as he watched the scattered groups of busy port workers. From this plot of ground man could now jump to the outermost edge of his universe. And from there? Bill shivered a bit and looked at his watch. Not many minutes to go.

Checking his gate pass, Bill saw that his flight was scheduled from Lot #5. Since the observation deck was at position "1" on the circle, Bill passed his eyes over the first three lots and focused on the fourth, about six hundred yards away. He could tell immediately that this was his. The feverish activity there made it stand apart from its neighbors. As he watched, the hangar doors swung slowly open and two tractor-cranes emerged, pulling the enormous spaceship smoothly into the open. It was on its side, nestling in the cradle. Supplies and cargo which had been neatly stacked in the loading area were taken aboard. Technicians swarmed over and into the ship, checking and rechecking every detail. Finally the cargo was all stowed away and Bill knew the crew chief would now

have received the last report from his squad, entered it on his tally sheet, signed it and handed a copy to the flight captain. The ship was cleared. The tractor-cranes started to tow it toward the takeoff tower where it would receive its passengers.

Bill straightened up from the railing on which he had been leaning, and went down the stairs. He walked along the boardwalk circling the port and had just passed Lot #2 when the bullhorns announced that Flight #328 for Poseida was ready at Lot #5. It requested all passengers to report to the lot immediately. Bill smiled a little inward smile. Thanks to his headstart, he could stroll along as if he did this sort of thing every day of the year, and still he would be first aboard.

At the entrance to Lot #5, he was met by a blue-uniformed corporal of the Security detail, who respectfully asked for his papers. Returning the salute as casually as he could, Bill handed over his folio. The corporal glanced briefly over the papers, made an entry on his list and handed them back.

"Thank you, sir," he said. "I wish you a pleasant voyage, sir."

"Thank you, Corporal," Bill answered, trying, and almost succeeding, in concealing his excitement. He continued along the corridor which passed through the administration building, reached Lot #5 and emerged into the open. There, about a hundred yards away, lay the ship, still on its side. He walked across to it and up the portable stairs which led to the passenger compartment. He was greeted at the

entrance by the copilot and three general hands. The copilot welcomed him aboard and assigned him seat #1. This turned out to be up front; just ahead of him was the retaining wall separating the passenger compartment from the control room.

All the seats faced the rear, so Bill settled himself comfortably and became interested in looking over the passengers as they came aboard. Mostly businessmen and clerks returning to Poseida after their leaves. Any important diplomatic or military traveler wouldn't be on this passenger-service flight. They would be on the high-speed Planet Earth Forces transports.

As Bill watched, a young man came through the doorway. He seemed a year or so older than Bill. He was slightly built, and he wore glasses. He had on a simple dark-blue uniform with a white stripe running along the shoulder, marking him a messenger in the Courier Corps. One of the general hands checked him aboard and led him to seat #2, right alongside Bill.

"Hi!" He greeted Bill with a friendly smile. "I guess you're going to be my seat buddy this trip."

"It looks that way," Bill replied, trying to sound as much like a seasoned space traveler as possible. "My name is Bill Hudson."

"Glad to meet you; I'm Griff Hughes," said the messenger.

Bill looked over the newcomer as he went through the motions of preparing for a period of relaxation. He stowed his hand gear in the little box provided for that purpose on the wall overhead, unbuttoned his tunic

and sat down with a faint air of boredom. Bill realized that his companion was not making his first trip into space, and he was glad to be lucky enough to have as his seat partner an experienced traveler who wasn't an old fogey.

When Griff had settled back, Bill turned to him and asked, "How many times have you been up?"

"I've lost count," Griff answered with a trace of condescension. "You see, I make the trip at least a couple of times a week, and I've been in the corps for a little over a year and a half—so I just never kept track. This your first trip?"

Bill nodded. "It's something I've wanted to do for a long time but I never got the chance before. Tell me, is it . . . I mean what's it like, the takeoff?"

"Oh, there's really nothing to it. Pretty soon the captain will give a little welcoming talk and instructions to the passengers, and then we'll take off. You don't go skittering along the ground and you don't see anything, so you get a bit of the sensation of speed but you don't really *feel* it. It's something like riding in those high-speed elevators. If the door were left open, you'd see the floors rushing by and you'd think you were really racing, but when the doors are closed, the only way you can tell you're traveling is by watching the little lights that let you know which floor you're passing."

Bill nodded, but he still felt a little puzzled. "I know what you mean," he said, "but this is so much faster I kind of thought . . . Well, anyway, I guess I'll be finding out for myself in a few minutes."

He leaned back in his seat, and then a thought struck him and he sat upright again.

"Say," he said, "you must know Poseida pretty well by this time. What are Poseidans like? Can you actually make friends with them? Do they talk to you? Is it dangerous? I mean, is it safe to fraternize with them?"

Griff laughed. "Oh, brother!" he exclaimed. "Which comic books have you been reading? Why they're people, just like you or me!"

Somewhat embarrassed, Bill realized that his flood of questions must have made him seem pretty foolish to his companion, especially since obviously there had to be continuous intermingling between the Poseidans and the Earthmen in their Colony on Poseida. But looking forward to his first meeting with these creatures, Bill wanted to be briefed as to what to expect and what was expected of him in regard to behavior.

He was about to explain this when Griff beat him to it and said, "Hold everything. We're about ready to take off. The captain is getting set to make his speech, and then we'll go. We'll have plenty of time to talk when we're spaceborne—so just sit tight and follow his directions."

This took Bill's mind off Poseida and focused it on the excitement of the moment. He looked around the interior of the ship and saw that the last passenger was in and seated in one of the widely spaced, full-length armchairs. The thick outer door swung closed on its hydraulic hinges, and a faint hum made itself heard over the small general noise of the passengers

adjusting their positions, clearing their throats, talking among themselves. The pressure machinery was taking over; those on the ship had breathed their last of Planet Earth's fresh air until their return.

Suddenly a loudspeaker crackled to life and someone blew into a microphone, testing the sound system. As the noise was amplified, a voice came on.

"This is Captain Martin speaking. Welcome aboard. This flight will take off in a few minutes, and for the benefit of those of you who are making your first space trip, I would like to familiarize you with certain procedures. Toward the rear of the cabin—that is, the end toward which you are facing—is the projectograph screen. Instructions to passengers will be written in the control room and flashed on the screen. At all times, when you hear this bell," at these words a bell sounded in the passenger compartment, "look at this screen and follow its instructions at once. As soon as the takeoff has been accomplished and we are in true flight, the television cameras will be switched to this screen so that points of interest may be observed.

"You are sitting on convertible seats. Just before takeoff they will flatten out and become cots. The attendants will strap you to the cots and will unstrap you after takeoff. They will also attach metal soles to your shoes. These will be attracted to the floor of the ship, which will be continuously magnetized during flight. While sitting, keep at least one foot on the floor at all times unless you are strapped in.

"There will be no smoking during takeoff. Remem-

ber we will be tilted vertically, so that the takeoff will occur while you are all in a standing position. You may be uncomfortable for a few seconds, but in less than a minute you will be completely adjusted to the conditions.

"Please do not converse during the period of the takeoff. Again, let me ask you to give the board your attention whenever the bell sounds. Thank you, and let's all look ahead to a pleasant flight."

The loudspeaker fell silent, and Bill realized that the palms of his hands were damp. He wiped them with his handkerchief and replaced it in his pocket just as the bell sounded. His eyes immediately flashed obediently to the screen, where a sign appeared:

"Please hold your arms to your sides. Your seats are about to be converted."

He moved his arms to his sides and held them there. All the seats moved in unison. The legs came slowly up as the back was lowered gradually, until Bill found himself lying flat on his back, staring at the ceiling. The three attendants passed quickly through the compartment, strapping the legs, waists and chests of the passengers to the cots, and fitting metal soles to their shoes; then they hurried to the rear, climbed on their own cots and strapped themselves down. A few seconds later Bill could feel the entire ship being picked up by the nose. Slowly it was pointed skyward. Bill's feet rested on a small ledge projecting from the bottom of the cot, and the straps held him in place, although his arms were free.

Again the bell sounded and Bill looked downward at the screen which, because of his position, was at the bottom of the compartment.

"Stiffen your knees and hold your legs rigid; we are about to take off," read the sign.

He set his muscles. The screen went dark and Bill closed his eyes.

Almost imperceptibly at first, he sensed the motion. Then suddenly the ledge was pressing hard against his feet and the straps strained to hold him. For several seconds the pressure mounted and then, as gradually as it had built up, it slackened, and in a few more seconds was gone altogether.

The bell clanged, and Bill's eyes snapped open and flashed to the screen, to see the word "Spaceborne" appear.

Chapter 3 100,000 Miles a Second

Now that he had cut loose from Mother Earth and was a part of the vast, deep space into which he had often gazed so longingly, Bill lost the sense of unreality with which he had been regarding everything. Up to now it had seemed to him that these things were happening to someone else and that he was merely looking on, able to see and hear but not to participate. Now it was different; it was happening to him, and he was on his way to a planet still often called "the Lost Planet," because it had taken man so long to discover its existence.

He had spent the last several weeks reading all he could get his hands on about Poseida, and he had exchanged letters with Maj. John J. Keller, so the basic facts about his residence-to-be were fresh in his mind. It was slightly smaller than Planet Earth, but its greater density gave it a gravity that was just about equal. Its atmosphere at sea level was almost identical to that on Earth, and quite fit for human respiration. The planet had been named after the Greek god of the waters, Poseidon, when it was discovered that its

principal inhabitants lived in the oceans and greatly resembled octopuses, the major apparent difference being that they had six arms, or legs, or whatever one chose to call them, instead of eight.

The intelligence of the Poseidans was reputed to be as high as that of Earthmen—indeed, some held that it might be higher, though this was hotly debated. Once Bill had glimpsed two Poseidans on Earth from a distance, as they were emerging from the sea and entering the large water-filled mobile tanks in which they traveled to and from conferences, but he had very little idea of what they were really like. He wondered if it would be possible to treat these creatures as if they were fellow-humans.

Bill felt his cot folding under him, and opened his eyes just as he regained a sitting position on what was once again a chair. The attendants were off their seats and had started to unstrap the passengers, but Bill didn't wait for them to reach him. He had unbuckled two of the straps and was working on the third, when he remembered about placing his feet on the floor. The ledge at the foot of his chair had withdrawn when the cot had been reconverted, so he planted both feet on the floor. Then he removed the last strap. He glanced at the screen just in time to see the television switch on. He was amazed to realize that the great sphere filling the screen was Earth. They had already traveled quite a distance and were out in space.

For the few minutes directly after the blast that had sent them on their way, Bill had forgotten all about

the messenger in the seat beside him. Now he turned his head to see Griff Hughes thumbing through the folders and pamphlets furnished by the spaceline to its passengers.

"That wasn't so bad at all," Bill said, by way of resuming their conversation.

Griff looked up and put the papers he had been reading into a pocket in the seat. "No, not at all," he replied. "They have it down to a science now. Blastoffs used to be wicked—people getting sick, even passing out."

"Yes, I've heard that. Frankly, that's why I was a little worried about it. I guess you never believe a blastoff could be done so smoothly unless you go through it yourself. You know there's always a chance that you're the one guy in a million whose system is thrown into a loop by something that doesn't seem to bother anyone else. The respiratory system alone is subject to seizure by any of a dozen sources, both psychosomatic and physical."

"Oh, sure," Griff said. "I knew a fellow once whose breathing used to get all botched up if he even saw a rose. He said that if he had to smell a rose up close for even a few minutes, it would kill him. As you say, though, it's a million to one shot; you can't worry about a thing like that."

"I don't," Bill answered. "It's just that I'd read a bit about the effects blastoffs used to produce, and I've seen so many people sick with maladies that you don't normally even hear of, that I . . . well, I was hoping I wouldn't mess things up."

Griff looked at him with interest. "What's your line? Medicine?" he asked.

Bill nodded. "Specializing in space medicine, as a matter of fact," he said.

"Hal!" Griff chuckled. "Figured you'd be a doctor. They're always worried about ill effects."

"Oh, we're not that bad," Bill laughed. He was getting to like this slender, bespectacled courier with the blunt speech. The fellow seemed to affect a sophisticated, man-of-the-world air which he advertised by his cynical approach, but he had an honest, open attitude which was likable.

"Maybe not," Griff said, "but that's why I'm just a lowly messenger traveling on slow passenger ships."

"That's why you're a courier?" Bill asked, amused.

"It's a long story," Griff said, as if the whole thing were quite boring, "but you see, I had intended to enter the Space Force and get my commission as a test pilot, since that's what I'm ideally suited for. The medical gentlemen looked at these," he pointed to his eyes, "and asked me if I had ever considered selling popcorn as a career. So, instead, my lightninglike reflexes and test-pilot mind are slouched into a soft seat a couple of times a week as we wheeze between Poseida and Earth."

"It's too bad," Bill sympathized, "but look at the responsibilities you have. I wouldn't call 100,000 miles a second exactly wheezing, either."

"Yeah," grunted Griff, "responsibilities. Hah! I'm not an enlisted man. I'm not a commissioned officer.

I'm in the inbetween limbo known as a white-stripe. And I don't care what you call this speed, to me it's wheezing. Those new babies, designed to go twice as fast—boy, they're for me!"

"If you're talking about the XL models, I should think you'd be glad you didn't have to go anywhere near them."

"Why?" Griff frowned, and behind his glasses his eyes blazed. "Because of a few accidents?"

"Not because of a few accidents," explained Bill, "but because every single one of them that went up with a test pilot at the controls just disappeared. Vanished."

"Aha!" Griff exclaimed; then his voice took on a conspiratorial tone. "Do you know why? Do you know why not one of the XL models ever made it back safely?"

"Poseidans?" guessed Bill.

"Hogwash!" the courier grunted. "They wouldn't hurt a flea. Because of these." He pointed dramatically at his eyes. "If I had been at the controls of any of those ships, they would have returned, believe me."

Bill couldn't help being amused by the confidence displayed by his cocky companion, but at the same time he felt a genuine sympathy for the young man who, through no fault of his own, had been eliminated from the career he so passionately loved.

"Griff," he said seriously, "I am sure you would make an excellent test pilot. But what if the Poseidans are somehow involved? What if they have evolved

some method to capture or destroy our ships? What could an unarmed craft manned by a single test pilot do?"

Griff Hughes waved his hand in an oh-go-away gesture. "That old witch's tale again! They don't have anything to do with it."

"Some mighty big men think they do," Bill argued.

"Which only goes to show how even big men can have small minds," Griff shot back. "Listen. I know many Poseidans, both in carrying out my duties and as personal friends. A nicer bunch of people you couldn't meet."

"Oh, I'm sure of that," Bill said quickly, glad of the opportunity to change the subject slightly. "To be honest, it seems funny to hear you talk of them as 'people' and 'personal friends.'"

"What would you talk of them as?" Griff asked sharply.

"Frankly, I don't know how to think of them," Bill confessed. "That's what worries me most. I'm afraid I'll make a fool of myself when I meet them. Do I shake hands? If so, with what?"

"Bill, m'boy, you came to the right place. Old Griff Hughes will straighten you out. Naturally, I had the same problem at the beginning and, quite as naturally, I solved it—so now you can have the benefit of my experience. There will, of course, be no charge." He waved his hand airily and Bill was forced to smile.

"Well, sir," continued Griff, warming up to his role as teacher, "think of it this way: If the phone rang in your place back on Earth, and you answered it with-

out turning on the viewscreen, and a voice you never heard before said 'Hello,' what would you say?"

"Why I'd say 'Hello,' too, I guess," Bill answered, a bit puzzled.

"You mean as natural as could be, you'd say 'Hello?'" Griff probed deeper.

"Sure."

"Well, there you are, man, there you are," Griff said, spreading his hands. "You have no idea what the person at the other end looks like, or who he is, and yet you just act naturally. Do you mean to tell me that if you carried on a conversation for a while, say on medical matters since that's your field, and then you switched on the viewscreen and saw you'd been talking to a Poseidan, you suddenly wouldn't know what to say next?"

Of course! That was it. You spoke from your mind to the mind of your listener, ignoring the shape that housed the mind. Bill felt a tremendous sense of relief—now he knew he could meet Poseidans and be at ease. He had been worrying about it all out of proportion to the problem involved, and now he realized that, while it would take some getting used to, he had it licked. He could talk to them naturally, bearing in mind what Griff had said about the telephone.

Griff sat there preening himself, altogether satisfied with the impression he had made. Bill looked at him and smiled and shook his head.

"So simple," he said, "so simple and yet it had me upset. I've got to hand it to you, Griff. Thanks."

"It was nothing," Griff murmured modestly.

"Let me ask you one more thing," Bill said. "You seem certain the Poseidans are entirely friendly to us. Do you have anything to base that opinion on, or is it simply your feeling?"

"I'll put it this way," his friend answered. "If there is one thing which this Courier Corps can do, it is to put its lowly messengers in touch with a great many people. When you get to meet very many people from ordinary ranks right up to the top, you get to know something about them. If, that is," he hastened to add, "you have a mind that can absorb things.

"Once in line of duty I was detailed to carry a message to Delu, the Leader of the Poseidans. True, it wasn't a matter of great state—in fact it contained routine greetings from the Planet Earth Forces on his birthday—but I met the man and he invited me to spend the rest of the afternoon with him. An invitation like that from the Head of the Poseidan State is, naturally, an order—so I remained. I can tell you, Delu is a great person. We both enjoyed each other's company—we exchanged views on philosophy, and so on—and I know that he doesn't have a vicious bone in his body."

Bill smiled inwardly at the thought of this brash young courier exchanging philosophical views with Delu, who was reputed to be a sage. Whatever else he might be, Griff Hughes was no shrinking violet; but then a courier who longed to be a test pilot had need of a large ego to sustain him. It was really only fair, and Bill accepted it in that light.

"I hope you're right, Griff," he said.

"I know I'm right," Griff answered in his grand manner.

"You may be right as a philosopher," said Bill with a friendly grin, "but as a medical man I can tell you this: Delu is a Poseidan. Organically, all Poseidans are Cephalopoda. They don't *have* a bone in their bodies."

For a minute Griff sat there as if trying to decide whether to be angry or hurt at being made light of, then he threw back his head and laughed. "Okay," he chortled. "Okay, that one was on me."

The next few hours passed rapidly for the young men as they talked and laughed and joked together. Bill learned a great deal about Poseida, for which he was most grateful. Food was served to them in their seats, and they were still talking when the bell sounded and the projectograph screen requested all passengers to strap themselves in. The attendants again passed swiftly through the compartment, removing the metal soles and helping wherever needed.

The seats again became cots and shortly the feeling of weight, scarcely missed during the trip, returned; Bill felt the pressure on the soles of his feet as the ship backed downward the last few thousand feet. The roar of the landing rockets was heard, and the ship gently settled to a landing, pointing toward the sky.

All the passengers remained strapped in a standing position until the cranes eased the hull onto its side. Then the cots were reconverted into seats and the passengers unstrapped themselves and began to crowd into the aisles, waiting.

Bill and Griff exchanged farewells, and Griff promised to look Bill up next time he had a detail which allowed him a few extra hours.

The outer door swung noiselessly open. The cabin was flooded with Poseidan sunlight, and the line progressed toward the exit.

Bill patiently kept his place and moved with the crowd slowly. Now he was at the threshold and stepping forward onto the portable stairs. Looking down, he could see a major of the Planet Earth Medical Corps among those waiting—of course, Major Keller, come to meet him! He hurried his step a little, said a quick final good-by to Griff, and headed down the stairs—to Poseida.

Chapter 4 The Encounter with Kutt

BILL FINISHED unpacking and walked over to the window. It was hard to believe he was four billion miles from home. The officer who met him was Major Keller, a tall earnest man whose warm brown eyes smiled even when the rest of his expression seemed serious. The trip from the spaceport was short, only a few minutes, and he had little opportunity to discuss his trip or to pay much attention to his surroundings. The major had introduced him to several of his aides, one of whom, Lieutenant Burns, had shown him to his quarters. Lieutenant Burns told him to unpack and change, if he wished, into something comfortable . . . there was no rush, but whenever he was ready, Bill was to walk over to Major Keller's office. With that the aide had left, and Bill, having unpacked and changed his attire and stowed his gear, was looking out the window.

Below him, at the bottom of the hill, the bay sparkled a brilliant blue. That was one of the things that took getting used to. Everything looked so much like Earth, and yet the colors were much more vivid.

They reminded Bill of some extremely old movies-in-color that had been shown in one of his history classes. Everything was the right color, but so brilliant as to seem unreal. His quarters, in a cottage perched part way up the hill about half a mile from the water, were at the center of the half-moon bay, and visibility was excellent.

He could see some activity on the broad ribbon of cement that ran along the edge of the bay. At numerous points ramps led from this walk into the waters of the inlet, but, as far as Bill could make out, all the figures moving about were humans like himself. Hoping to catch his first glimpse of a Poseidan on his native planet, he moved over to the bureau and extracted his battery-powered electrooculars from one of the drawers. He took these back to the window and, putting them to his eyes, focused on a group of men who were standing at the head of one of the ramps, staring down its slope into the water, almost as if they expected something to come out of the depths.

Bill watched for a minute, and was about to sweep away from this group to observe other areas, when he noticed a small surface disturbance of the water, as of some object moving quite deep below. He tensed, centered the area of disturbance in his electrooculars and slid the little lever down to the point of maximum magnification. The water movement was becoming more distinct and Bill knew that whatever was causing it was approaching the surface. Excitement coursed through his veins as he watched the heavy

ripples move toward the ramp; his eyes squinted in an effort to take in every detail of the area, even though the limited field he was watching appeared much clearer and bigger to him than to those waiting at the top of the ramp. At last the underwater motion reached a point only a few feet from where the ramp entered the bay. There was a moment of stillness and then three leaping splashes, and three objects appeared on the ramp.

Bill's heart pounded. His eyes glued to the electroculars, he examined the Poseidans minutely. They did look like octopuses, no question. Their round, bulbous bodies were resting on the concrete with their tentacles—or legs—spread on all sides. Then with a strange, graceful motion, their legs drew under them and straightened, lifting their bodies into the air. When they were in this position Bill could count their legs easily, and found that all he had read was true. They had six legs. It was funny—when they were lying down it seemed as if their tentacles were jutting out all around their bodies, but when they stood like this, facing the group of men at the top of the ramp, it was clear there were three legs on each side of the body.

For a moment they stood there, the men and the Poseidans, looking at each other. Then with a motion that might be described as a continuous, rhythmic undulation of their legs, the Poseidans advanced rapidly up the ramp and met the men. Bill could not, of course, hear a word that was said, but, from the expressions on the men's faces and from the general air, he deduced that greetings were being exchanged.

Finally, Poseidans and men moved together toward the rear of a huge van parked on the cement ribbon. Ascending slowly, they moved up a ramp leading into the van and disappeared inside.

When they had gone, Bill laid aside his electroculars. He had been so engrossed in these strange people that many minutes had melted away and now he would have to hurry. Although he had been told to come down to Major Keller's office whenever he was ready, it would be discourteous not to get there within a reasonable time. He stepped over to the mirror and neatened his hair. He stopped for a minute by the door, looked around to make sure he had left everything in order and, with a light heart and expectant mind, started for Major Keller's office.

Bill entered the long, squat building which housed the Medical Headquarters. He was challenged by the sergeant who sat at a reception desk just inside the main entrance.

"William Hudson to see Major John Keller," Bill answered the challenge formally.

The sergeant pushed a button on his intercom and repeated the information into the microphone. After an instant's delay, a buzzer sounded and the sergeant picked up an earpiece and listened. Bill could not hear what was said but the sergeant replied, "Yes, sir," then put down the earpiece and said to Bill, "Lieutenant Burns will be here to take you in, sir."

"Thank you," Bill returned.

A little of the military stiffness seemed to melt from

the young sergeant, and he said to Bill, "You just get here?"

"Only a few hours ago."

"First visit?"

"Very first," said Bill. "In fact, this is my first trip away from Earth."

"Well, I hope you enjoy it," replied the sergeant. "As for me, I was stationed on our satellite station on the Moon, and I'm just winding up a two-year hitch here. It's a nice place for a visit," he concluded, "but I sure will be glad to get back to Earth and home, sweet home."

As he said this he straightened up and the military starch returned. Lieutenant Burns entered the lobby and walked up to Bill.

"Hello," he said. "Major Keller asked me to escort you to his office. Right this way."

He turned and started down one of the two corridors which converged onto the lobby. Bill followed him. At the end of the corridor they stepped into an office through an open door, and an enlisted man stood at attention and saluted Lieutenant Burns, who returned the courtesy.

The lieutenant paused outside a closed door leading to an inner office and knocked.

"Come in, come in," Major Keller's voice called.

Lieutenant Burns opened the door and held it open as Bill stepped through.

Major Keller got up and came around the desk toward Bill with his arm extended.

"Aha!" he said as he pumped Bill's hand, "I see

you've spruced up a bit and you're probably anxious to look around the place. Well, I won't keep you long." He motioned to a chair and bade Bill sit in it, then sat down behind his desk. "First of all, now that we have time to talk," the major said, "how was your trip?"

"It was wonderful," Bill burst out enthusiastically. Then, calming his voice: "Nothing out of routine, sir. But I enjoyed it."

"Good, good. I'm afraid the first trip is usually disappointing. The only time travel becomes exciting is when something goes wrong—and then nobody has time to get excited. Too busy. Thank goodness, it doesn't happen often. At least not on these flights." He turned serious, businesslike. "These are, ah, not normal times. You may have heard something of the sort down on Earth."

"Yes, sir," Bill answered, "there has been talk of some trouble brewing, but no one seems to know exactly what . . ."

"Well, no matter," Major Keller broke in, dismissing that line of talk. "It is no concern of yours officially. However, you must bear in mind that as an Earthman you cannot help but represent Earth to some degree. In your dealings with Poseidans, any resentments you may cause will be aimed in part against all Earthmen. Now I know General Watkins would never have sent you to me, if he didn't know that you would be an asset to our Colony here, but I felt I had to mention it because it is important to bear in mind that whenever you are away from home your conduct reflects not only on yourself but on your home."

"I am indeed aware of it, sir," Bill answered, "and I feel sure that I'll get along very well with the Poseidans."

"Of course, of course," said the major and he waved his hand emphatically. "It's just that in, ah, times like these we can't be too careful. However, enough of that. You're here on vacation. Look around all you want and if there is anything you need, ask me or any of my staff."

"Thank you, sir. I'll be especially careful not to tread on any toes."

As soon as the words were out he felt like kicking himself. Poseidans didn't have toes. It was little slips like this one which might cause an awkward moment in conversation with the creatures.

Major Keller didn't seem to notice his lapse, so Bill continued, "I want to thank you, Major, for accepting me as a guest here."

The major smiled. "Not at all, my boy," he said. "Glad to have you. I understand you're specializing in space medicine. As you know we have a fine laboratory on base and we are carrying on an extensive research program. If anything there interests you, spend as much time as you like and ask as many questions as you wish. The staff is chronically short-handed and can use a new man like yourself if you wish to give them any time later. For the moment I suggest you spend the next few days sightseeing and getting yourself acquainted with Poseidans and their planet."

This was exactly what Bill had wanted to hear. He

was anxious to spend as much time at the laboratory as possible. Things couldn't have been going better. He stood up.

"With your permission, then, Major, I'd like to take a walk around."

"Fine, fine. Oh, by the way, you'd better take along a copy of this booklet." The major reached into a drawer and extracted a slim paperbound volume. "It's the standard Guest Guide. Tells you what sort of schedule we run here. Mess hours, restrictions—that sort of thing. Good information in there, too. You'll find the double-page map in the center very useful." He stood up, facing Bill, and handed him the pamphlet. "Let me repeat: don't hesitate to ask for anything you want."

They shook hands and Bill departed, having thanked his host again.

Once outside, Bill relaxed. Now he was on his own, with a whole planet to be explored and an entirely new people to be met. It was hard to tell where to start. The first thing he wanted to do was to get away from the bustle of the base. He walked along the pathway that led to the main gate, then through the gate and down toward the bay he had seen from his window. When he had passed through the gate, he paused, pulled out the booklet Major Keller had given him and opened it to the map.

For the same reason that he had wanted to get away from the base, Bill felt he would rather not go down to the bay where everything was so businesslike and where Earthmen abounded. Studying the map, he

saw that over the hill to his left there was another, smaller bay about two or three miles away. The only road led straight down to the water ahead of him, so he left the road and cut cross country, walking up the gentle rise. When he had topped the hill and was walking down the other side, he stopped and looked around him. Now he could see no trace of other men. No buildings, no transmitter masts. He was alone on Poseida. At least that was how it felt, and Bill liked it.

The countryside was not too different from that which he was used to. The dark-brown land, spotted here and there with various shades of green, undulated toward the bright-blue water. Aside from the electric quality of the colors, it was very much like Earth.

As he walked, he drank in the beauty of the land, trying to set up in his mind what his first meeting with its inhabitants would be like. Should he be especially formal in order to take no risk of offending, or should he take a free and easy approach, as if this sort of thing happened every day? He was a little nervous but he felt the first encounter would probably handle itself. Being occupied with his thoughts, the first time he heard the sound it hardly registered with him. Then he heard it again and froze.

It was a thin sound. Almost like a faint voice. He stood immobile and strained every nerve listening. Had he imagined it? Now it came again, so soft it seemed like the voice of the breeze itself, but definitely a sound. He had clearly heard the word "Help!" He stood poised for a moment, then ran forward and stopped to listen again. This time he heard it clearer.

"Help!" Still indistinct but louder.

Once more he ran forward and stopped.

"Help! Please help!" came the cry.

Bill cupped his hands to his mouth and shouted, "Hello! Where are you?" He was still not sure that someone wasn't playing a joke on him. A pretty poor joke it would be, he thought. The voice was so thin and high it sounded as if it were being purposely disguised.

"Over here by the tree," came the answer. "Turn a little to your right and come over here. Hurry, please."

Although he still could see no one, Bill obediently sprinted for the nearest large tree, about fifty yards ahead. When he was right up to it, he saw a Poseidan lying on the ground. One of its legs was gripped firmly by the cruel jaws of a steel trap which was fastened to the tree by a chain.

Swiftly Bill sized up the situation. "Take it easy, feller," he said soothingly, dropping to one knee beside the trap. "I'll have you out of here in a minute."

He tried to separate the jaws of the trap, but the spring was too strong and his hands slipped off the metal. A small moan came from the Poseidan as the jaws snapped together again.

In desperation, Bill again strained at the trap, and, as the jaws moved slightly apart, he exerted greater force. Disregarding the pain as the serrated edges bit into his flesh, he gathered his strength and with one vigorous pull opened the trap.

"Thank you," gasped the Poseidan, "please get me to water. I can't stay out much longer." The creature

quivered and lay helpless. Bill picked it up and put its body on his shoulders, grasping its legs piggyback fashion. He started for the water, which was about a mile away, running, stumbling, urged on by the gasps from the creature on his back. Every now and then the word "Water" would come from the Poseidan in pleading, half-delirious tones.

"I'll have you in the water in just a minute," Bill panted, as he struggled over the terrain that had looked so smooth from a distance but was uneven and rough beneath his feet. It was hard to keep his footing, running down the slope, missing a step, then catching it and regaining his balance as he made his way to the water. It was the longest, most difficult mile of his life. The urgency of the situation made him oblivious to the hurt of scraped ankles as they turned on loose stones. His fingers, torn and bleeding from their struggle with the trap, gripped their burden as if they had never received a scratch. Pain was forgotten for the moment as Bill spurted out short words of encouragement. "Easy now . . . we're almost there . . . you're going to be okay."

Then, at last, a few final steps brought him to the water's edge. He knelt and gently eased the Poseidan from his shoulders and, cradling the creature in his arms, held it over the water. He lowered the Poseidan until it was just beneath the surface and released his hold. It sank down about five feet to the bottom and stayed motionless.

Bill remained there on one knee, peering into the water, trying to perceive some sign of life. Clear

though the water was, vision was distorted by tiny ripples on the surface so that he could see the shape of the Poseidan but all detail was lost. Many times he started at what he thought was a movement in the water, but he could not be sure that light refraction hadn't been playing tricks with his eyes.

Then all six arms moved at once and Bill knew the Poseidan was alive. He watched the creature growing in vitality and strength and after a few minutes saw it leave the bottom and hover, suspended, in the water. It paused, its arms undulating slowly, and then deliberately made its way to the top.

As the head and body broke through the surface, Bill smiled and said, "Glad to see you're okay now."

The Poseidan looked at him steadily for a moment and replied, "I suppose I should thank you for saving my life, anyway."

Bill gestured and said, "Not at all. Glad I could help. You'd have done the same for me, if our positions had been reversed."

"Yes I would have," returned the Poseidan evenly, a note of controlled reproach in its voice, "but I wouldn't have trapped you in the first place."

Bill was stunned. Apparently the Poseidan was blaming him for having set the trap. "I didn't set the trap."

"No?" came from the water. "Were you just inspecting the traps to see what some other Earthman had caught?"

"Now look here!" Bill's voice rose in annoyance. "I didn't set the trap and I wasn't inspecting it. I happen

to have set foot on your planet for the first time in my life just a few hours ago. I'm visiting here mainly because I'm interested in space medicine. I don't go round setting traps even back home, but if I did I certainly wouldn't expect you people to get caught in them on dry land." Having gotten that much off his chest, Bill's anger left him and he hoped he hadn't gone too far. After all, this was the home of the Poseidans and they definitely had the right to go anywhere without fear of getting caught in a trap.

"It seems I owe you an apology," said the Poseidan. "I am indebted to you for my life. I hope you will forgive my rudeness, but I have nothing but contempt for the Earthmen who set these chulla traps. There's a fat profit for the poachers in chulla fur—but the animal is protected by law. I naturally thought . . ." The voice trailed off, then continued: "All this obviously has nothing to do with you and I can only repeat my apology."

"Think nothing of it," Bill said. "I can understand what you must have thought. The important thing is that everything turned out well."

He rose and was about to walk away when the Poseidan called out, "Wait! Before you leave I want to know your name."

"I'm Bill Hudson. I hope we'll meet again while I'm here," Bill answered. "Under better circumstances," he added with a smile.

"We will meet again, Bill Hudson," said the Poseidan. "My name is Kutt and I shall see that you are repaid for saving my life."

"Lay off," Bill answered good-naturedly. "Forget it. I'm in medicine, I told you. Saving lives is my job."

"We shall meet again, Bill Hudson," Kutt repeated. "In the meantime you should put your knowledge to use on yourself and treat your hands. They need attention."

Bill looked down and noticed that his fingers were stained a dark red from the blood that had poured from his wounds and was just beginning to dry.

"I guess you're right," he said. He wanted to rinse them but hesitated to wash the blood off in the water which was Kutt's home. "I'll get on back to the base. They'll fix me up in a jiffy there. So long for now, Kutt, and good luck," he concluded and turned to start his walk back.

"Thank you," Kutt called. "I shall see you."

When he had walked part way up the hill, Bill turned and waved a grimy red hand. A slim arm raised out of the water in answer and then Kutt slipped beneath the surface and was gone.

Chapter 5 *Bill Hudson, Diplomat*

JUMPIN' JUPTER, what happened to you?" Major Keller was crossing the broad grounds just inside the main gate as Bill came through. Bill's attempt to answer the question was stifled by the major who hustled him over to the post infirmary at double time. While his hands were being cleansed and treated, Bill managed to relate the incident. Luckily, it was found that the wounds though painful were not serious. The duty doctor took three stitches in the deepest cut, applied a powder which eliminated any danger of infection and sprayed on a sealant.

Once the extent of the injury had been ascertained, and the story told, Major Keller left, asking Bill to report to him in his office when he had cleaned up. From the way the major listened to his account, Bill could tell nothing about how the story had been received. He felt a certain anxiety as he returned to his quarters and shed his stained clothes. Although he knew perfectly well he had done nothing wrong, still here he was involved in an incident with a Poseidan

within a few hours of his arrival and Major Keller's admonition to beware of creating resentments.

Well, there was nothing that could be done now, thought Bill as he climbed into fresh attire, easing his bandaged hands gingerly into the sleeves. He hoped Major Keller could see that he was in no way responsible for what happened and yet he felt he could not belabor the point. With a fatalistic shrug, he walked into Medical Headquarters and announced himself to the sergeant at the desk.

A different man was on duty but at the mention of the name the sergeant snapped alert and said, "Oh, yes, sir, Major Keller asked that you be sent directly to his office. Do you know your way?"

"Yes, thank you," Bill replied and started down the corridor. As he came to the open door of the anteroom, he took a deep breath and walked through. Several officers who had been standing together talking in low voices looked up and conversation ceased. Lieutenant Burns detached himself from the group and walked over.

"Ah, Cadet Hudson, Major Keller will see you right away."

Cadet Hudson, Bill thought. They're going awfully formal on me. Funny how a simple greeting can set a mood. "Bill" would have made it friendly. "Mr. Hudson," a little starchy, perhaps, but to be expected from a lieutenant on duty. But "Cadet Hudson" put him squarely under military jurisdiction.

Lieutenant Burns knocked on the closed door and the familiar "Come in, come in," sounded. Bill walked

through and Lieutenant Burns took two steps into the room, saluted and announced, "Cadet Hudson, sir."

The major returned the salute and said, "Thank you. That will be all, Lieutenant."

As the door closed behind the departing officer, the major turned his attention to Bill, standing at attention in front of the desk.

"Sit down, young man."

Bill sat down at attention. He was waiting for the major to speak. If he were to be sent back to Earth now it would be crushing. A search of the major's face revealed nothing. Major Keller spent a few minutes in silence, looking down at his desk as if choosing his words carefully; finally he looked up.

"Well," he said. He paused, cleared his throat and continued, "This Poseidan you, ah, met. His name was Kutt?"

"Yes, sir."

"You didn't tell me that before."

"I suppose it just slipped my mind, sir," Bill answered. "I didn't think the name was important."

"In this case it is," Major Keller said, leaning back in his swivel chair. "The name Delu means something to you?" This was half-statement, half-question.

"Why, yes, sir," Bill answered, puzzled. "Delu is the Poseidan Patriarch. He is the Leader of the entire planet."

"Exactly." The major leaned forward and rested his elbows on the desk. "Delu has one son—a lad of about your own age. His name is Kutt. You met him today."

Bill's head reeled. That did it. Getting himself in-

nocently involved in an unpleasant event was not enough. It had to be with the only son of the commander in chief. He groaned inwardly.

"I have spent most of the last hour in communication with Poseidan Headquarters," Major Keller continued. "They are treating this thing at the very highest level. A full report will have to be made to the Combined Chiefs at home." He sighed wearily. "You have no idea how much paperwork that involves. We'll have to keep our staff working overtime for the next week just to handle your case. But, son," he stood up and stretched his hand out to Bill and his face broke into a wide grin, "I'm proud of you."

Bill stood up and accepted the hand uncertainly. "Proud of me?" he faltered.

"I should say so," the major said heartily. "You are to be awarded the Poseidan Medal of Devotion, the second highest honor in their lists."

Bill stood there dumfounded. In his anxiety as to how severe his censure would be, it had never occurred to him that he would escape without reprimand, much less that he would be rewarded.

"I—I don't understand," he stammered. "I didn't do anything. I mean, I just happened to be there when . . ."

"Come, come, my boy," Major Keller broke in, smiling, "Poseidans don't just hand out their medals for nothing, any more than we do. But, to the business at hand. I'll need a full report from you. Can you have it ready for me in the morning?"

"Yes, sir."

"Good. The ceremony will be the day after tomorrow at Poseidan Headquarters. General DeVere is having his protocol officer sent over to brief you so you'll know what to do and how to respond. It's quite an elaborate ceremony, I understand. Now then, did you bring your cadet uniform with you?"

"No, sir, I didn't," Bill answered. "I was to visit as a civilian, and since I had no official status . . ."

"Of course, of course," the major interrupted. "Well, no matter. I'll have my aide take you to the quartermaster where something will be whipped up that will do. All right then, Bill," he finished, walking around the desk and toward the door, "you'll have that report here first thing in the morning?"

"Yes, sir!"

Major Keller opened the door and gave his instructions to Lieutenant Burns, then shaking Bill's hand again, he returned to his office. Bill followed Lieutenant Burns.

Until the ceremony was over and the presentation made, Bill didn't have a moment to his name. When he was not filling out report forms and signing affidavits, he was being fitted for a uniform. On and off through the day, he would be called to Major Keller's office where a Colonel Vandersteir, General DeVere's protocol officer, ran through the ritual of the ceremony, and together they rehearsed Bill's part in it. Although he applied himself to mastering the role he was to play, Bill would much have preferred to skip

the entire thing. Major Keller's constant reiteration of what a great thing this was to interplanetary relations made Bill feel that to some degree then the fuss was worth-while. The uniform was not a bad fit considering the rush, and as a medical man, Bill carried no arms. There were just the silver belt and the ceremonial, gold-plated replica of a Colt .45, an ancient weapon which had passed out of use except for decoration on State occasions.

The day itself went well. The presentation took place in a large room designated the Hall of the Universe, and contrary to his expectations Bill made no mistakes.

The Hall had been designed especially for use on occasions when Earthmen were present, and had canals running underneath the floors, emptying into a large pool in the center. This pool had sloping sides, so it was an easy matter for the Poseidans to emerge and carry on their business with Earthmen assembled within the room. The ritual itself was very formal, with the Earthmen and Poseidans lined up in formation facing each other, and Bill Hudson and the Poseidan Chief Deputy standing alone between the formations.

After the ceremony, when refreshments were being served, Kutt sought Bill out. He found him and moved up in back of him.

"Hello, Bill Hudson."

Bill recognized the voice and whirled around. "Kutt!" he exclaimed with pleasure, "I'm very glad to see you."

"No more glad, I assure you, than I am to see you. After all, it is thanks to you that I am here."

"Oh, please," said Bill earnestly, "there has been so much more fuss made over this thing than was ever warranted. I do appreciate your kindness and your father's generosity more than I can tell you, but, really, I would appreciate it even more if we could forget about it now."

Kutt gave a short laugh, almost a giggle of mirth. "I think I know how you feel, Bill Hudson," he said. "You're a good fellow. Before we forget entirely about it, though, I am directed by my father to invite you to spend the next few days with us. He would like to meet you personally and he feels you should get to know us better."

"I'd be delighted," Bill answered in all sincerity. "I shall have to talk with Major Keller first."

"Oh, he is not likely to refuse Father," Kutt said with a chuckle.

"No, no, I didn't mean it that way," Bill corrected himself hastily. "I am on Poseida as a guest of the major, and it would hardly do to move out on my host without an explanation."

"Ah, yes, of course," Kutt teased. "It is a wonder your diplomatic corps allowed you to enter any other field, Bill Hudson."

Bill laughed. He felt increasingly at ease with this jocose Poseidan.

"Okay, okay," he said, "quit pulling my leg. You know very well I feel honored and happy to accept—on one condition."

"A condition, Bill Hudson?" Kutt sounded surprised. "What would that be?"

"That you call me Bill. Not Bill Hudson. All my friends call me Bill."

"Agreed, Bill," Kutt answered, waving his arms with pleasure. "Strictly agreed."

Chapter 6 Poseidan Hospitality

THIS WILL be your room," Kutt said as he led Bill through the door. It was a large, rectangular room, tastefully furnished and ingeniously designed. Bill's eye was caught particularly by a canal that ran the entire length of one wall, making the place useful for both Poseidans and Earthmen. The door at the entrance, which slid out from the wall at the touch of a button, extended into the canal, so that when it was closed the privacy of the room was complete.

Kutt gestured gracefully to a multiswitch panel built into the wall by the bed. "If you should want anything at all," he continued, "just press this button. The one over here locks the door. If anyone wants to come in, he presses the release button outside your door. If you have your door locked, it will not open but this red light flashes on and you will know someone is outside. You may talk through the closed door by means of this microphone, and finally by pressing this button you open the door."

"You seem to have thought of everything," Bill re-

plied, nodding approvingly. "This is really a layout." He walked over to the window and looked out. Directly below was the ocean, and the long, low buildings, of which his room was part, curved gracefully into the water and disappeared beneath the gentle ripples.

"Does the Palace continue on under the water?"

"Certainly," Kutt answered. "In fact, before contact was established between your people and mine, the underwater part was all there was. This extension was built later. You see," he added mischievously, "whereas we Poseidans can exist outside our natural element for several hours at a time, you people would have difficulty visiting us down there."

"Yes," agreed Bill with a laugh, "I guess we would have."

"Say," Kutt said, as the idea suddenly struck him, "do you swim at all?"

"You bet," Bill answered enthusiastically. "I love it."

"Get your stuff on and I'll take you down to the beach," urged Kutt. "I'll show you around the rest of the place later. We have plenty of time for the tour."

"Great!" Bill cried happily, "I'll be ready in a jiff."

Bill walked through the knee-deep water. Off to his right, Kutt romped about where it was deeper. Suddenly Bill launched himself forward and, swimming with his face underwater, headed for his friend. Kutt veered off and with effortless grace glided toward the long pier which jutted out from the land. He reached it and waited for Bill who came splashing up.

Bill reached up and got a fingerhold. The water was well over his head here.

A bubbly laugh came from Kutt, who was floating easily on the surface.

"What's funny?" Bill called over.

"Forgive me, Bill," Kutt gurgled in his mirth, "but I just can't help laughing every time I see one of you Earthmen swim. You make such a production out of it. You're very graceful on land, but in the water . . ." His speech was drowned out by the giggles bursting from the bubbles around him.

Bill appreciated the joke and enjoyed seeing his friend so cheerful. Then he got an idea. "So you fellows are graceful in the water, huh? Okay, then let's see you try this."

He hoisted himself out of the water and climbed onto the pier. He stood poised for a moment, his toes curling around the edge. Then with a muscular thrust he curved into an easy arc and completed a flawless dive, slicing cleanly into the water.

He surfaced, shook the water from his face and with a wide grin said, "Your turn, Kutt."

"What am I supposed to do?" asked Kutt, somewhat perplexed by this turn of events.

"You saw what I did," Bill answered, chuckling. "Go to it."

Resignedly, Kutt lifted himself out of the water and stood on the pier. "What do I do now?" he called in comic bewilderment.

"Just dive in gracefully," Bill answered, laughing.

and then as Kutt hesitated, "Don't tell me you're afraid of the water!"

Thus goaded, Kutt pushed himself off and executed what could best be described as an ungainly fall into the water. Their voices mingled in loud laughter as they both raced toward the shore.

Later Bill lay on the sand, his feet stretching into the water. Kutt sprawled nearby, letting the cool water lap over him. At the far end of the beach the Palace rose out of the sea and anchored itself on land. Behind it rose the great Mount Tiflah. On Poseida the mountain was the highest point land reached. At the summit the huge Tower of Life rose massively into the sky and completely dominated the surrounding landscape.

The two had become fast friends. Funny how these things work out, thought Bill. You can know some people all your life and never really get to know them. With others, you barely exchange greetings and you know that they are "your sort of guy." That's the way it was with Kutt. The two had spent all morning and half the afternoon together and they were now close friends. Many things could be left unsaid between them. Each understood the way the other felt without needing a detailed explanation. Bill had told Kutt about Eddie Watkins and what a great guy he was. "You'd like Eddie," he had said and Kutt said that he was sure he would.

After a momentary silence, Bill looked up into the sky and said, "You know, Kutt, I wish certain people down on Earth could be here now. If they met you

and knew what you people were really like, they'd feel a lot different."

"I guess that's the way it always is," answered Kutt. "People are always afraid of what they don't know. That goes for my people as well as yours."

"Well what exactly is the trouble?" Bill asked. "I've heard a great many rumors and some vague charges, but I've never had anyone pinpoint for me just what the problem is."

"I can't speak officially, of course," Kutt replied. "I can only give my own opinion."

"If it comes to that," returned Bill, "I shouldn't be discussing this sort of thing at all. I was cautioned against getting into anything controversial but . . ."

"You were cautioned," Kutt broke in. "Hah! You should have heard Father! He went over the Principles of Behavior in their entirety twice over, but I know I can speak in confidence to you. Will you tell me on your honor that whatever I say to you will never be repeated?"

"You have my word," Bill answered solemnly, "and I have yours?"

"You have," Kutt said. "Now I can give you my opinion as to what is wrong." The Poseidan settled himself comfortably and began to talk.

"I'm going back quite a way because I believe the trouble had its beginning from the very moment our two peoples met. As you know, our ionosphere differs from yours. Light and heat rays may enter our atmosphere but are prevented from leaving it, much like the way light can enter a one-way mirror but is pre-

vented from reflecting back. Because of this total lack of reflection of light and heat, your people did not know of our planet. We, in fact, knew about you for a long time and finally perfected our light engine, which enabled us to make the trip to Earth. Although we were the first people really to travel through space, and although both our people seemed to have developed along the same lines scientifically, we always have felt that we were regarded as inferiors by Earthmen. I suppose it was because we seemed so different. But then I imagine that your people must have looked very peculiar to my ancestors.

"At any rate, when we established the Poseidan Colony on your Earth, in what you call the Pacific Ocean area, we granted you colony rights here. You developed your own spaceships, using our basic devices which we donated to your scientists. Your scientists were of great help to us in other fields, and it seemed as if a great era of interplanetary friendship was developing.

"Unfortunately there has always been a faction of Earth people which did not fully trust us and feared that we were dangerous to them. Ironically, these were the same people who considered us so inferior. On our side, we had people who resented this attitude extremely and, instead of realizing that the small segment of trouble-seekers on Earth did not represent popular opinion, turned against all Earthmen. Now, when any Earthman here commits even such a small treaty violation as to set traps to

catch chullas, these extremists don't regard it as the irresponsibility of one man but as a sign of the unreliability of all Earthmen. They agitate to sever all connections with Earth. They haven't gotten anywhere, of course, because Father is not the sort to be stampeded by a group of hotheads, but it does nothing to improve relations.

"As I understand it, your scientists have developed the engine that uses light as its source of power to a point where they may even be able to exceed the speed of light itself. I have heard it said this works in much the same way that those sailboats you people use for pleasure can sometimes exceed the speed of the wind which powers them. I am not a scientist, so how it works doesn't much interest me. What does interest me is the fact that every one of the new ships your people have tested has disappeared and we are being blamed.

"This has given great impetus to the movement of those Earthmen who have always disliked us, and as a consequence both sides have stopped thinking logically and are allowing their emotions to run away with them. If they do allow their emotions to run them wild, it will be disastrous."

There was a silence as Kutt stopped speaking. Finally Bill spoke. "You have given me a much clearer picture of the situation than I have ever had, Kutt, but is it really as simple as you have made it sound? The way you put it, it sounds as if a small group of Earthmen don't like Poseidans and a small

group of Poseidans don't like Earthmen and that is the whole problem."

"Well, basically that *is* the whole problem. But both are noisy and dedicated groups."

"All right," said Bill, coming directly to the point, "then what about our missing spaceships?"

"I don't have the answer to that," Kutt replied, "but I do know that neither my father nor his Government has anything to do with it."

"Spaceships don't just disappear," Bill persisted. "Our scientists may not be infallible but they wouldn't let ship after ship merely vanish. They have loaded them with warning devices that could send a message back to Earth. Our test pilots are highly trained men. They are intensely indoctrinated and are under strict orders to flash the word back if the slightest thing goes wrong. Yet they have never been heard from. Doesn't that seem to indicate they are being struck down in some manner by some outside force without the slightest warning?"

"It could be," Kutt mused, "but I know that we are not responsible."

Suddenly an idea came to Bill. "Kutt," he said, "did it ever occur to you that some little group such as you mentioned might have decided to take matters into its own hands, and with the help of one or two renegade scientists have figured out some way to down these ships in retaliation?"

"No, to tell the truth, I never thought of that," Kutt said. He paused for a moment, thinking about it, then decided, "No, Bill, such an undertaking

would have to be on such a large scale it could hardly escape detection by both your Government and mine. I don't believe it could work that way."

"I suppose you're right," Bill conceded. "Boy, I'd give a lot to know what's behind it all."

"That makes two of us," said Kutt. "And a few billions of our people."

Chapter 7 *The Tower of Life*

DURING the next few days, Bill learned more about Poseidans than most of his fellow Earthmen learned in a lifetime. He met Delu and discovered for himself what others had already recorded. Delu was wise and kindly, but what impressed Bill most was a great sadness which reflected itself in Delu's speech. More than once, Bill wanted to bring up the subject which he knew must be uppermost in his host's mind, but felt that Major Keller would not approve, and Delu showed no sign of introducing the state of interplanetary affairs into the conversation. On thinking it over, Bill decided that it might be all for the best if the topic were avoided, inasmuch as he might let slip some words of his confidential conversations with Kutt, and thus make trouble for his friend.

One curious Poseidan custom bewildered Bill throughout his visit. Before every important moment of the day, such as on awakening, and just before meals, all Poseidans faced the Tower of Life on Mount Tiffah and raised an arm, as if in salute. A minute of silence followed, during which Bill, too,

faced the Tower and stood quiet, feeling a bit awkward, not knowing whether to salute or simply stand there. He was always relieved when the moment was over and conversation resumed, but no reference was ever made to the rite. Somehow he always hesitated to question Kutt about it.

On the last day of his visit, Bill and Kutt spent the afternoon walking on the beach. They chatted as they moved along aimlessly, bringing up incidents in their past lives, laughing when it appeared that, although they were born billions of miles apart, many experiences in their backgrounds had been similar.

They had walked for about an hour and were sitting at the far end of the beach, where the water lapped gently at the white sand, when Bill became serious and turned to his friend.

"Tell me if I'm stepping out of bounds, Kutt, and I won't feel hurt, but there's one mystery that has been puzzling me."

"If I know the answer, I'll certainly tell you," Kutt answered. "What is your big mystery?"

"It's your Tower of Life," Bill said bluntly. "Obviously it commands tremendous respect among your people, yet I can't tell whether it is a symbol of your national unity, such as our flag, or whether it is a memorial, or what. I'd heard of the Tower before I ever came here, and it seems that everybody on Earth has a different opinion of it."

"That's very interesting," Kutt mused. "What are some of their opinions?"

"Some think it's like a flag, some think it's a

memorial, others say it's just a watchtower," Bill replied. "I've even heard that it has no real significance . . . it's just a tower, like one that used to exist in a city on Earth called Paris. These people say that throughout the ages some Poseidans started saluting it, and now everybody does without knowing why."

"And you," Kutt said evenly, "what do you think?"

"To tell the truth, I don't know. If it were a sort of flag or memorial, you people would talk about it and probably discuss it proudly. None of you ever so much as mentions it to Earthmen, and if the subject does come up, I understand your answers are always noncommittal. I don't believe the watchtower theory either. First of all, your people don't need one, and second thing, it would readily be explained as such if that's what it is. Finally, you and your father and others I've met at your home are too intelligent to be saluting something without knowing why."

"Thank you for your vote of confidence," Kutt said with a chuckle.

"You know what I mean. At any rate, if you'd rather not talk about it, I'll understand."

"I was just teasing you. This Tower of Life is our one big secret. We don't even speak about it among ourselves. . . ."

"Sure, Kutt," Bill began, "as I said, I understand. If you'd prefer not to . . ."

"No, no, it's not that," Kutt broke in. "I want you to know that personally I trust you implicitly, just as I feel you trust me. As the son of Delu, I believe that if our two peoples shared the confidence in each

other which we enjoy, any threat to the peace would disappear. There has to be a beginning somewhere, and I think you and I could well be that beginning. So, although I know Father would not approve heartily, I feel it right you should know and understand about our Tower. This will be strictly between us, and you must never talk about it—directly or indirectly—with anyone else. Right?”

“You have my word,” Bill said simply.

“Good. In one respect, at least, Earthmen guessed correctly. The Tower is a symbol, but it is also functional. It is a symbol of our security, and is saluted as such. But the Tower also provides our security. You see, it is a highly developed mass-energy transmitter.”

There was a momentary silence before Bill spoke.

“You can be sure your secret will be safe with me,” he said, as a faint smile played around the corners of his mouth, “because I haven’t the least idea of what a mass-energy transmitter is.”

“I see,” Kutt went on. “Have you had much physics?”

“No. Of course I’ve had some, but, since I was going to take up medicine, I never got much beyond the routine elementary amount everyone has to take.”

“In a way that’s good,” Kutt said with a chuckle, “because if you were a whiz in physics you would probably ask me questions about it that I couldn’t answer. I can tell you roughly how it works. You do know that mass and energy are interchangeable?”

"Sure. That much, I know," replied Bill. "Mass is just one form of energy and vice versa."

"All right. To go on from there, mass translates into density, which is measured by weight. Check?"

"Lead on, Professor," Bill smiled, "I'm with you so far."

"Now take a rotating body following a fixed orbit in space," continued Kutt. "Suppose you added density, what would happen?"

"Well, a number of things could happen," Bill hedged.

"True, of course, but one thing that would happen immediately would be a proportionate increase in the body's gravity."

He paused, and Bill allowed the import of what had just been said to sink in. He thought it over and then, "Why, yes," he said slowly, "the greater the density, the greater the gravity. That would follow. Where does the Tower fit into all this?"

"Right smack in the middle of it," Kutt said emphatically. "The transmitter head on the Tower swivels to pinpoint any target chosen, and its range carries into any corner of our universe. When the target is centered and the circuit closed, mass is transmitted in the form of energy. With no change in shape or size, the target body becomes steadily denser. Its gravity increases and all things on it are pressed onto its surface, held immobile by their own weight."

"Sufferin' Saturn!" Bill exclaimed. "If a man were on the target planet when that thing was turned on,

he'd slow down without knowing why until he finally couldn't move at all, right?"

"Right!"

"And if," Bill continued, "the target planet were Earth . . ." The thought stunned him. Nobody on Earth even suspected that such a machine existed, he felt certain. If war ever came, the Poseidans would put an end to it quickly.

Bill thought of the group of hotheads on Earth who were so anxious to tangle with these people. If they knew what he had just learned they would change their tune. It occurred to him that in the light of the mass-energy transmitter, it was imperative that the cordial relations between Earth and Poseida of the first few decades be re-established.

"Are you sure it works?" he asked finally.

"Oh, it works all right. It has been tested on various planetoids, and it has been perfected through the years."

"Our history books say the Tower was standing when the first contact between our people was made," Bill continued. "Was it an energy-mass transmitter, or mass-energy transmitter, or whatever you call it, then?"

"Sure. It's been a transmitter since it was put up."

"Well, then," Bill asked, "why in the name of Mars doesn't your father just make a speech and say something like, 'Look, people of Earth, most of you want peace. We want peace. We have a transmitter that will paralyze you if you start anything, so let's have peace?'"

"You sure make it sound simple," Kutt laughed.

"Oh, I didn't mean in exactly those words," Bill said seriously. "He'd say it in regular diplomatic style and all."

"That's not the point. Father feels that we have been humiliated throughout the years by a vague, implied sense of superiority on the part of some of your people. Naturally, we Poseidans resent it. Father believes if he made our secret public it might be taken as an aggressive move and would build an even deeper resentment among Earthmen. Also, once your scientists were put on the track, he thinks they would duplicate our Tower in a short time. That would remove our security."

"I guess that makes sense," Bill said.

A new thought struck him. "Say," he burst out, "do you suppose the mass-energy transmitter has anything to do with the disappearance of the new spaceships?"

"Not a chance. Father is the only one who can activate it, and tests are held only once or twice a year in an area where no spacecraft ever travel. Besides, the reaction isn't instantaneous. Even when operated at full capacity, the transmitter would give an Earthman of average strength several minutes in which to flash a warning that something was happening to him. He might not know what was going on, but he'd be able to give the alarm—and all your ships have disappeared without warning, remember?"

Bill had to admit his friend was right. It would not

take much to press the alarm button which would send out the automatic distress signal. All the vanished test pilots had been alerted to the possibility of mishap and would have signaled as soon as anything departed from the normal. No, whatever it was had struck without warning. In a flash, the pilot or his ship, or both, must have been completely disabled.

Bill was certain Kutt knew nothing more than he did about the mystery of the XL ships, and he felt reasonably sure if Kutt didn't know anything about it, then neither did any other Poseidan. This seemed to put them in the clear, and yet try to explain that to the people back home!

"Ah, yes, my boy," he could imagine General Watkins saying, "Kutt is a very nice chap, to be sure, but how do you know he is telling you the truth when he says he knows nothing about it?"

Since he couldn't reveal that he and Kutt had sworn mutual pledges of secrecy, much less disclose the meaning of the Poseidan Tower of Life, his, "Well, I just know he is," in reply would sound pretty weak. The general would put him down for an addlepated sentimentalist. It was frustrating.

Kutt broke into his thoughts. "I believe I know what you're thinking," he said.

"Oh? What?" Bill challenged with a quick smile.

"You're thinking that the troubles between your planet and mine are all merely troubles of the mind. Fancied insults smoldering in our minds and imagined threats boiling in yours. You're thinking that all these fears could be easily allayed and all the ill

feeling put to rout if only you could find the formula."

"That's it!" Bill exclaimed in amazement. "If we could only find some way to show people how false their ideas are, all the tension on both sides would drop away, and we could go back to the old days when Earthmen thought Poseidans wonderful and Poseidans thought we were great. How did you know what I was thinking?"

"Because the other night, after we'd been talking, I realized that I had been slipping into the thinking habits of some of my countrymen—and how wrong I had been. When I discovered what a great guy you were, just like a brother, I thought along the lines that you were thinking right now. If everybody got to know each other the way we do, there would never be any real trouble."

Bill was deeply touched by Kutt's words. Somehow, it simply had to work out all right. His mind winged to the future and he could see Eddie stationed on Poseida, Kutt in the Government, and himself at work in Medical Headquarters. What a team!

Kutt spoke, his words breaking into and bursting the bubble of wishful thinking. "There's nothing you or I can do. There are too many of them, and, besides, they have it figured out that because they are older, they must be right."

"Yes, isn't that funny? Two older people may disagree with each other violently—but each still feels sure he must know more than the rest of us, just because he's lived a few years longer."

"Well," Kutt sighed, "what can you do?" Then, changing the subject, he smiled and asked, "Now, listen, just because your visit is over and you're going back to your base, that doesn't mean we're not going to see each other, does it?"

"You bet it doesn't," Bill answered emphatically. "I'll have plenty of spare time, and—with your permission—I intend to spend most of it right here."

"Wonderfull! Come down as often as you can. By the way, what sort of work are you going to be doing here? Or are you going to work at all, since this is your vacation?"

"Sure I'm going to work. In fact that's why I was so anxious to visit your planet in the first place. Since space medicine is my field, wouldn't I be foolish to pass up the opportunity to study here? I hope to continue some special research work I was doing, too."

"What sort of research?" Kutt asked, interested.

"For one thing, cosmic radiation. I've already completed the C.R. course, but I'd like to push it further. My big project is to find the antisuss drug."

"What in cosmos is the antisuss drug?"

Bill laughed at Kutt's bewilderment, and said, "The real name of it is the antisuspended animation drug."

"Oh," Kutt said gravely. "Well, you've cleared that up. Now, just one more question—what is the antisuspended animation drug?"

Bill grinned. "It's like this. As soon as the spaceship problem is solved, the big brass is planning a

flight into real outer space. Clear out of our little universe. No matter what speed is finally attained, it's going to take a long time to get anywhere. After all, we consider a star only one light-year away to be fairly close in. So, even if our ships traveled at the speed of light, it would still take a whole year to get to one of these nearby stars or their planets, if they have any, right?"

Kutt nodded silently, and Bill went on, "That's where suspended animation comes in. We can induce that with a drug that has already been perfected. Here's the way it works. Once out in space and fixed on course, the crew swallows a pill that has been worked out for them, and they go to sleep. Not a sleep as we know it—their entire metabolism slows down to a whisper.

"That way, they need no food, other than what was in the pill. They need an absolute minimum of air, because their breathing and pulse rates are barely active. They don't get bored just sitting or lying on their bunks on long tedious trips—and best of all they don't age."

"You mean they stay the same age all the time?" Kutt asked incredulously.

"No, they age somewhat," Bill explained, "but at a very reduced rate. For instance, suppose a crew were to make a flight to a point five light-years away. That would be a round trip of ten years. Without the drug, how many such trips could a man make in a lifetime—even assuming he didn't go batty from sitting in a chair for so many years?"

"Not many, that's for sure," Kutt murmured.

"With the suss drug," Bill continued, "he would be completely oblivious to time, and when he returned his whole physical structure would have aged maybe six months."

"That's terrific!" Kutt exclaimed. "You say you have the drug now?"

"Oh, yes. We've tried it on all sorts of test animals, and even on men in minute doses, but the snag is this. Suppose you prepare for the five-year trip. You're out in space. On course. You take a five-year pill. You're flying on a beam, under control of your home base. As you sleep soundly, conditions change and for some reason or other your flight-control officer back home decides he has to pull you in. Your ship lands back on the field, and you and your whole crew are fast asleep and will remain that way for five years."

Kutt laughed uproariously. "That would be funny," he guffawed. "Boy, I can think of several people I'd like to see that happen to."

"It would be funny all right," Bill agreed, "but not very useful. So that's what I'm working on—an antidote to reverse the procedure in case of need. So far, it hasn't been found, but I'm hoping to continue my research and, who knows, someday I might get lucky."

"Wow, that must be exciting! Imagine working on something that might change the whole course of history."

"In a sense it is exciting, I suppose, but mostly the

work itself is tedious. You try one thing after another, and then limitless combinations of the things you've tried. You have to keep detailed records of everything you do, then conduct the tests, find you've failed, and start all over again with a new approach. It can get you down at times, but if you ever hit the right combination, it makes every little boring detail worth-while. If you don't," he concluded, "at least you can feel you did your best, and your records will help some other researcher, because the thousands of test failures you've had need never be repeated."

"I wish I had a talent for such things," said Kutt wistfully. "Any kind of scientific work has always fascinated me. I guess I'm just not the type."

"I can't imagine any more important work than government," Bill said sincerely. "After all, medicine only helps men to live longer, but without government they'd be just savage tribes of anarchists."

"Speaking of governments," his voice rose shrilly. "Leapin' Libra, do you realize how late it is?"

"We have been here an awfully long time," Kutt answered, stirring himself, "but there's so much to talk over, time seems to race by."

"It sure does," Bill agreed, jumping to his feet. "I forgot all about it. I have to get back and thank your father and say good-by and report back to the base. Major Keller is probably waiting for me now."

"Just tell him you're arriving fashionably late," Kutt laughed as they both hurried to the Palace. "It's an old Poseidan custom."

Chapter 8 Compound 5083

BILL CHECKED into the base and was interviewed by Major Keller, who wanted to be sure that everything had gone well. It was amazing how anxious these military men were to avoid even the slightest unpleasantness. A long interrogation ascertained that nothing untoward had occurred and that Bill had a standing invitation to return to the Palace—a sure sign Delu had been well pleased. Major Keller and his staff seemed greatly relieved.

Later that evening, Bill entered the reading room of the officers' club, where a number of junior officers introduced themselves and proceeded to pump him about his stay at the Palace. He answered their questions as politely and noncommittally as possible, and was afraid that he left them thinking him quite dull. He knew it was wiser not to make his private opinions generally known, however; they would certainly be written off as the errors of an impressionable youth.

He was glad when Major Keller spotted him, and

the two went to a corner of the lounge, where the major brought up the subject of Bill's career. When he heard of Bill's eagerness to continue his research during the remainder of his stay on Poseida, he was elated and immediately promised to assign him a completely equipped bench in Laboratory #2.

"I wish you every success, lad. Heaven knows we need plenty of work in both C.R. and antisuss. I'll sign an order tonight authorizing you to take out supplies from the dispensary."

As Bill prepared for bed that night, a pleasant, happy glow seemed to envelop him. The warmth of Kutt's friendship and the thrilling anticipation of having his own laboratory bench to work at wafted away all the problems of the day, and he looked forward to the morning with uncontrolled delight.

The following day, Bill was up at dawn. He had not the least desire to linger abed, but jumped out almost as soon as his eyes opened. He splashed through a hurried shower, dressed, and was off toward the mess with a springy step.

At breakfast he slowed down his impatient pace a bit when he saw that the clock gave him a full hour before he could reasonably enter the laboratory. After all, if he got to the place before eight o'clock, the orders assigning the bench to him might not have arrived, and he would have to wait around under the suspicious eyes of the guard at the entrance.

When, finally, he had just enough time for a leisurely walk to Laboratory #2, he downed the re-

mainder of his milk at one gulp and strode out the door.

As it turned out, Major Keller had left the papers in order when he went around on his final inspection trip at midnight, so there was no difficulty. Bill was shown to his bench, and he marveled at the efficiency with which it was set up. Beakers, test tubes and all the paraphernalia he might conceivably need were racked neatly in built-in receptacles. The back of the bench was lined with small cages, where the guinea pigs for his experiments could be kept under his observation.

Other similarly equipped desks were ranged about the large floor, and at one end a counter set into an opening in the wall served as the dispensary. Here Bill could order every imaginable chemical merely by filling out a receipt form. Here, too, the guinea pigs and other test animals could be obtained.

Bill put the papers he had brought with him into the spring clip on his desk and, pulling a pad of order blanks from a rack at one side, he sat on the tall stool and furrowed his brow.

The next few days passed in a concentration on paperwork. Bill had to review his work up to the present so that he could plan his experiments. Finally, he was completely caught up, and the supplies he had ordered were stowed neatly in their proper places. He grabbed a standard research form and where it said "Name of Researcher" he proudly wrote "William Hudson" in bold letters. He filled in the nature of the problem being investigated, the

proposed method of procedure and the identifying number assigned to his project. Where it said "Test Number" he slowly and thoughtfully wrote "One."

Then he got to work. He ground powders in his mortar and mixed liquids. He measured and calculated and measured and mixed again. Extracting his final distillates, he injected them into the test animals and set up an observation schedule.

Once he had made his injections, his workload eased off and he felt entitled to a little time to himself. Leaving instructions with the laboratory technician to continue observations and to call him if anything unusual happened, he headed for the beach.

A group of Poseidans was frolicking offshore and, looking for Kutt and not seeing him, Bill sat down to watch them. Shortly, one of the group detached himself from the others and came gliding through the water toward him. Bill watched as the Poseidan, whom he was sure he had never met, emerged from the water and moved up to him.

"You Bill Hudson?" the Poseidan called out.

"Yes, I am.

"Kutt asked me to keep an eye out for you. If you'll wait here, I'll go call him."

"Thanks," Bill shouted, surprised, as the Poseidan slipped beneath the surface again.

Bill waited a few minutes, scanning the water for a sign of his friend. Then suddenly with a great splash the seas parted and Kutt burst through and landed on the beach. He squatted, dripping wet, beside Bill.

"Halloo, halloo, halloo!"

"Well, hi!" returned Bill, somewhat taken aback by this enthusiastic if unorthodox greeting.

"So out with it, man, tell me," cried Kutt, who was obviously in good spirits, "did you find out all about cosmic radiation and did you discover the antisass drug?"

"It's the antisass drug and, no, I didn't discover it," Bill smiled. "And no one knows all about cosmic radiation. How about yourself? How have you been?"

The two friends chatted, each filling the other in on the events of the past few days.

Inevitably, the conversation drifted around to the current crisis, and Bill said, "You know, I've been thinking. It seems to me your father could do a great deal toward dispelling the rumors and wild stories that are being circulated on Earth. If he would make a trip down there and appear in person at the next meeting of the Concourse, he could make a speech that would end once and for all the charges the hatemongers are throwing around so indiscriminately. I think one reason Proctor Glussan has had such success with his campaign of fear is the silence with which Delu meets all the attacks of Glussan and his bunch."

"Father would never do that," Kutt said positively. "To begin with, if he ever answered one of their reckless charges, he'd have to spend all his time answering every allegation Glussan could dream up. After all, if he proved one charge a lie and then didn't answer the next one, people would think he had something to hide."

"I suppose that's true," Bill agreed reluctantly. "Still, Delu commands a great deal of respect among the people at home. He has a reputation for great wisdom and I'm sure he could make them listen."

"Do you think the good Proctor Glussan would just lie still and let the calm, reasonable truth take hold?" asked Kutt with a snort. "Not on your life! Even more than that, Father doesn't want to beg for peace. He says nothing would be worse than to appear weak and have to accept whatever crumbs the opposition deigned to offer. No, Father feels that, as leader of Poseida, he has done nothing to jeopardize Earth's position, and as far as our security is concerned, he's relying on the Tower. If hostilities should break out, he'll flip a switch and . . ."

Bill shuddered. "It's pretty grim. And yet that would not necessarily end a war," he added. "After all, we have bases on the Moon and other satellites, and on this planet, too, for that matter. They couldn't all be immobilized instantaneously—and they'd retaliate at once."

"Sure they would. But you know the old saying, cut off the head and the arms die."

"Funny you should put it that way. Eddie's father, the general, said almost the same thing," Bill said, shaking his head. "Whichever way it goes, there'll be a horrible slaughter on both sides if war actually breaks out."

"It would be terrible. Simply terrible," Kutt said in a low voice. "I wonder what would become of us. You and me, I mean."

They sat there in silence a few moments, contemplating the terror a war would create. Two highly developed worlds, each armed with weapons to stagger the imagination, could cause a holocaust. Peace had prevailed for so long that most of the newer instruments of war had never been tried on a large scale. When they were unleashed, the entire solar system might be affected.

Finally, Bill slapped his knee and broke the silence.

"Enough of this morbid stuff. The way we're carrying on, you'd think the fate of the universe lay in our hands. I'll tell you what, if things get bad, we'll each take hundred-year suss pills, crawl into a hole, and not wake up till it's all over."

"Hundred-year pills? That's a long time. Is there a hundred-year pill?" Kutt asked incredulously.

"No," Bill laughed, "I was exaggerating. I only mean that since we can't do anything about it, let's forget it and turn to more enjoyable things."

All talk of trouble and crisis and war was turned aside as they enjoyed each other's company.

The next several weeks found Bill extremely busy. His research project increased in tempo as experiment followed experiment. As each failure was recorded, a new test took its place, until they overlapped. Before tests on the latest batch were completed, a fresh compound was started through the routine. Spare time, which became progressively scarcer, was spent with Kutt, and Bill grew to prize the few hours he could devote to his friend. Evenings, after the lab-

oratory was closed, he would corner medical men in the officers' club and extract their views on cosmic radiation, making notes which he hoped to compile later into a reference volume.

Bill's bench at the laboratory no longer had the fresh, neat look it had possessed when it was first assigned to him. To an outsider, it presented a façade of chaos, but to Bill, pushing his project forward with a dedicated fervor, it represented a sort of orderly disorder.

The officers at the other benches, immersed in their own work, respected this young interne and his capacity for driving himself on by what at times seemed sheer willpower. The general workers and the laboratory technicians admired his determination and were anxious to help. Even the goldbricks, who were expert at disappearing when a desire for their services appeared imminent at the other benches, would drop by and ask Bill if there was anything he wanted done.

At one point, Bill walked over to the dispensary counter and requested six more guinea pigs.

"I'm sorry, sir," he was told, "but we're waiting for the next shipment. Right now we're fresh out."

"Oh, no!" he exclaimed in dismay. "You can't be. This will set me back days." And days were getting more precious, he thought. He was to leave Poseida at the end of the summer, and the weeks were flying by.

"I'm awfully sorry, sir, but the demand recently has been well above normal and our supply is

exhausted. We're expecting replacements any time now," the orderly added brightly.

Bill was crestfallen. He knew that the above-normal demand for guinea pigs could be attributed at least partly to his experiments, but he had not foreseen a shortage. If anything like that was impending, he should have been told. Frustrated and chagrined, he stood there trying to think. There was no way around it—without guinea pigs his experiments must come to an abrupt halt. In desperation, he turned again to the orderly, who had remained at the counter, a look of futile sympathy on his face.

"Don't you have even one?"

"I'm afraid not, sir. You use the two-year-olds, don't you?"

"Yes," Bill answered absently. Then a ray of hope struck him and he asked excitedly, "You mean you have others?"

"Just the young ones. One month, six weeks old."

His mind raced. Normally, in delicate work such as he was doing, one used test animals of the same age group, to eliminate as many outside variables as possible. And yet, if one could establish a formula to stabilize the differential . . . one could run pilot tests to check the formula . . . it might work! It was certainly worth a trial.

"I'll take six of them."

The orderly looked puzzled. He knew you were not supposed to change in midexperiment, and he prided himself on the way he kept track of what each workbench was using.

"But . . ."

"Six of them," Bill repeated with finality, looking the orderly square in the eye.

"Very good, sir. Please fill out the form while I get them."

With a shrug of resignation, the white-coated orderly disappeared into the back of the dispensary.

Bill took cheerful possession of the tiny animals and carried them carefully to his bench. He was glad his experiments would in no way harm these babies. The method of air injection under high pressure eliminated the use of the old-fashioned needle, so there was no pain attached to this operation.

He was aware that the introduction of immature guinea pigs might interfere with obtaining correct results, but he prepared a control factor and set to work. At worst it would only mean that the test results would have to be thrown out. Even that was better than just sitting around idly, awaiting the arrival of the older animals.

Late in the afternoon, Major Keller came around on his regular tour of inspection. He walked through the entire laboratory, stopping at this desk and that, chatting briefly with the personnel and in general taking in the situation. He paused at Bill's bench and asked if anything new had developed. Had the experiments shown any trend? Was everything proceeding satisfactorily? Bill answered the routine questions and was given a few words of encouragement.

As the major crossed behind Bill's bench, his attention was caught by the little animals, each in his own

pen. He stooped to look at them, then straightened up and chuckled.

"Are these decrepit old things the best you could do," he smiled, "or are you working on problems of old age?"

"Well, those were the only animals available, sir," Bill replied apologetically. "You see, they ran out of adults and I decided to continue the work on immature animals until the next shipments arrive."

"Ran out of adults? Immature animals?" the major asked, puzzled. "Why, these patriarchs are so ancient, they should be put out to pasture."

"Oh, no, sir! They are just four to six weeks old."

"Now look here," the major said, fixing Bill with a steady eye. "Each man here conducts his own experiments and I don't know most of the time exactly what work he is doing or what results are being attained. I don't question him too closely, because I feel it is better to let a scientist follow his own paths without too close a scrutiny. But that doesn't mean I am new to this business. I certainly can recognize an old guinea pig when I see one."

Bill was polite but he stood his ground. "I'm sorry to contradict you, Major," he said, "but I requisitioned those guinea pigs just this morning."

He put down the test tube he had been holding and walked around to where the major stood in back of the bench. As he reached the cages, he started to point out the obvious marks of extreme youth. "You see, sir," he began, and then froze. All six guinea pigs were wrinkled with age! It was impossible—and yet

these were indeed ancient animals. "But . . ." he stammered.

Major Keller smiled tolerantly. "Well, maybe they had a hard life," he murmured, and then, noticing Bill's dumfounded expression, he added, "I think you've been at it too hard, Bill." He patted the boy's shoulder. "Take some time off and relax. There's a limit, you know." With another pat on the shoulder, the major turned and strode out the door.

Hardly aware of the major's departure, Bill stood staring at the cages. Then the spell broke and he knelt, feverishly opening each cage and examining the animal inside. The little tags which had been attached were his, all right. Slowly he returned the animals to their pens and walked around his bench. He climbed onto the stool, placed his elbows on the bench and buried his face in his hands. He had to think.

The major was wrong. He wasn't overworked; he knew what he was doing. It was just that the result was unexpected. His thoughts fell into place, and, as he reviewed what he had done that day, the conclusion formed in his mind that this was something of tremendous importance. He grabbed a pad and made some quick calculations. Then he laid out a test plan. If his conclusions were correct this was going to be big!

He requisitioned twelve more guinea pigs and treated them with the same solutions he had used earlier in the day. He made careful note of their physical condition; heartbeat, pulse, etc., were typi-

cal of young guinea pigs. He established the time and recorded each step with great accuracy. Then he ordered sandwiches and settled down, prepared for a long vigil. He arranged the cages on the table in front of him so that he could watch each animal at all times.

Every hour he gave each a complete physical examination, and, as the figures on his pad grew into a long column, it became apparent that his theory had been right. These guinea pigs had been given a vastly increased rate of metabolism. Like mayflies, they were in the process of living out a normal life cycle within the space of a few hours.

By morning, a haggard but very happy young man greeted Major Keller on his morning inspection.

"Good morning, sir," he boomed out cheerfully.

The major regarded his unkempt appearance, the sandwich papers crumpled in a corner of the bench, the whole desk top strewn with cages. His eyes traveled from Bill's tired but joyful face to the wizened guinea pigs, and back again.

"Good glory, lad," he exploded, "have you been here all night?"

Bill nodded.

"Playing nursemaid to these . . . these antiques?" he sputtered unbelievably.

"Twelve hours ago these senile guinea pigs were just a few weeks old, Major," Bill announced in a proud voice.

"What!" The major was convinced the boy had cracked. Overwork, no doubt. It was a pity. The lad

had shown so much promise. He was about to signal to his aide, when Bill started to speak.

He explained carefully what he had been doing. Without hurry, he reviewed the entire night's work, and when he had come to the end of his story and Major Keller was intently examining the sheaf of papers Bill handed him, he concluded, "So you see, sir, inasmuch as the symptoms of old age appeared in the correct sequence and at the right proportionate time, and the only physical defects apparent are those of genuine old age, it appears that Compound 5083 is capable of inducing an increased metabolism rate without harmful side effects. In short, I believe Compound 5083 is the antisuss drug!"

Chapter 9 *An Unexpected Trip*

MAJOR KELLER looked up from the papers. His voice trembled with suppressed excitement as he said, "It looks very much as if you've hit it, Bill. Now I tell you what I want you to do. Get over to the mess and have yourself a good hot meal, then hit the sack and sleep yourself out. When you're fresh, I want you to come back here and review the work you have just done and write up a complete report.

"While you're away I'll see that none of your equipment is disturbed, and I'll have three more benches assigned to your control." He looked around the room, then pointed. "Spiero, over there, Lowrie and Rees. All good men. I'll ask them to shelve their work for a day or so to help you. I've got to have that report as soon as possible, because . . . well, when you bring it over to my office I'll fill you in on the background, and you'll understand the rush."

"I can start on it right away, sir. I'll catch up on my sleep when it's finished."

"No, no. The report won't mean a thing to me or

anyone else unless it contains not only your work of last night, but a complete check of every phase. It's going to take weeks, maybe months, to know whether we have a completely reliable antisuss drug here. The first and most important step now is to have a thorough basis for future work. I will feel a lot more confident if your final tests are conducted when your mind is rested and fresh. With Spiero and the other two on it, too, your report will qualify as the official document."

Bill understood the major's position and readily agreed. He did the briefest possible cleanup job on his bench and left the lab. The special mess pass the major had given him entitled him to order any meal he wished, regardless of the hour, but even his favorite food—steak and french fries—had no taste for him. His mind was whirling too fast for the food to make any impression.

Surprisingly, he found that he was quite sleepy now that the initial excitement had passed. As soon as he had finished eating, he headed for his quarters, where he dropped off to sleep almost before he had drawn the cool crisp sheet over his tired body.

When Bill awoke, dusk was settling outside. After his first confusion, memory flooded back and he sat bolt upright. A quick shower, a hasty struggling into clothes, and he was on his way.

At the laboratory, the guard recognized him at once and put in a call for Rees, Spiero, and Lowrie, who had been keeping themselves ready to help him. They hastened over and congratulated Bill on his achieve-

ment. Then the four held an informal conference and established a work program. In order to provide the most impartial conditions possible, it was decided that the three men would do the actual work, while Bill compiled and computed the figures they gave him. They chose control animals into which they injected inert solutions, others into which nothing was injected, and the final group which received Compound 5083.

The four plunged into their work, and as the hours flew by and the figures started coming in, Bill could see his original findings being confirmed. After the last test was completed and the final mathematical computation concluded, the four met around Bill's cluttered bench. All the entries were checked and doublechecked, and finally the report was drawn up and signed by all of them.

Bill extended his hearty thanks and shook hands all round, then with the final report in a large envelope under his arm, he headed for Major Keller's office. It was almost eight o'clock in the morning, and he intended to leave it on the major's desk so that it would be available to him when he first reported to work.

When Bill reached the outer office and found Lieutenant Burns on duty, he asked the officer to place the envelope on Major Keller's desk.

"Why don't you go in and give it to him yourself?" the lieutenant suggested.

"Oh, is he here already?"

"Well, I came in over an hour ago, trying to get the jump on him. He's been looking so worried

recently and working so hard, I thought I could clear up a few things for him before his arrival." The young officer shrugged and spread his hands in a gesture of futility. "He'd been here for an hour before that. Yes, you'd better go in and take the report to him personally. He'll be glad to see you," he confided.

Bill thanked him and knocked on the door.

"Come in, come in," the familiar call sounded through the panels.

Bill walked in, and the major looked up from his desk. He had been talking into the speechprinter, which automatically translated his spoken words into neat type.

He pressed a button to cut off the dictating microphone, then said, "All set, eh? How did it turn out?"

Bill handed the major the envelope and he extracted the report. Letting his eyes run over the sheets of paper, he picked up the highlights and then read the conclusion carefully. He smiled as he looked up.

"Well done, Bill. Really well done. This checks out very nicely. There's a lot of work still to be done before we can pronounce it safe for human consumption. We'll have to work out dosages and probably convert it into a powder that can be compressed into tablet form, but the big job is done. Professor Mercer is going to be awfully proud of you when you get back. I'm proud, too, son."

"Thank you, sir," Bill answered, feeling very happy but a little uncomfortable at the direct praise.

"Now then," the major continued, "how do you feel?"

"Just fine. Really fine, thank you."

"I mean with your being up all night . . ."

"Not sleepy in the least. Really, sir, I slept all day yesterday and I couldn't sleep now at all."

"Good, then. Sit down, I want to talk to you."

Bill took a seat and waited expectantly. Major Keller cleared his throat and seemed to be choosing his words carefully.

"You've been doing a great deal of work in cosmic radiation?" It was a half-statement, half-question.

"I've completed the course, sir, and done postgrad work."

"Yes, I know. I've looked up your academy record. Now answer this. You are presented with a case of overexposure to C.R. How do you treat it?"

"Well, I would first determine to what extent the overexposure had occurred."

"Yes, of course, of course. Let's suppose it was rather heavy. To the fifth degree, let's say."

"Fifth degree?" Bill's eyebrows raised and he pondered a moment. "To begin with, I would start the standard C.R. shots. The patient would be confined the first day. Bland diet. Then, if the patient's schedule permitted, a close observation to continue and the shot schedule to be maintained, I would permit him a limited freedom of movement. No hard labor, but . . ."

"Many doctors would disagree with you. They

would insist on the patient's being confined to bed throughout the period of treatment. Perhaps as long as a month."

"Yes, I know, sir, but I have not found that any significant improvement occurs when the patient is confined. To the contrary, a long period of inactivity actually seems to slow down recovery, due to a general weakening of the body when there is complete lack of exercise. The patient's mental attitude is also apt to be adversely affected by enforced idleness." Bill was a bit puzzled by the informal quiz he was being given, but this was a subject which interested him.

"Good. Good. I had hoped that would be your viewpoint." The major leaned forward and lowered his voice confidentially.

"This is the situation. We have just lost another XL ship. Vanished, just like the rest of them. Glussan and his gang are crying for blood and this time it looks as if they might succeed. In any case, there is to be a meeting of the World Concourse next week, and from what I can gather it's going to be a showdown. General DeVere has ordered me to attend. For some reason I can't fathom, they want a medical man present, and the general will remain here to implement any decision reached by the Concourse.

"Now here comes the problem. Two days ago, in making a routine flight to gather cosmic material, I'm afraid I allowed myself to be exposed to a bit more radiation than I had planned. To be exact, I have just concluded an examination which showed an exposure to the fifth degree."

"You, sir?" Bill asked, wide-eyed. "Then you are the patient you were speaking about!"

"Exactly," Major Keller answered, looking a bit ashamed of himself. "I should have known better, but . . . well, no matter. The important thing is that I have to attend this meeting. You know the old saying that a doctor who treats himself has a fool for a patient. I'll want someone around to treat me. Someone who won't feel that I'm nullifying all his efforts if I continue to work and attend the sessions. I shall have a suite assigned me at Headquarters which can be converted into a sort of hospital room, so that I can continue under treatment and observation. I will naturally have work to do between sessions, so I shall want somebody whom I can trust completely. The fact is, I have asked to have you assigned. Do you want the job?"

"Oh, yes," Bill burst out. "Yes, sir! I mean, of course!"

The impact of this news was double-barreled. On the one hand, he felt concern for the major's health which was to be put in his charge. On the other hand, this meeting carried a frightening portent. There was no way he could influence the Concourse, he knew, but he was glad that he would be receiving firsthand news of developments.

"Fine. In that case, I'll want you here tomorrow night at nine o'clock. We'll take off at nine-thirty."

"You mean we're going back to Earth tomorrow night?" Bill asked in surprise.

"Exactly. I'll want as much time as possible to prepare for the meeting. We'll travel by regular pas-

senger service so as not to cause any undue interest in our movements. We'll leave without fanfare.

"Needless to say, you are to consider yourself under military security from this moment on."

"Yes, sir," Bill said stiffly.

"Now, regarding my treatment. I've already given myself the preliminary shots, so check with me this evening. You can look me over again in the morning and then just before takeoff. Spend your remaining hours here as you like, but be ready on time—and remember, no breach of security, even by indirection."

"I'll remember, sir. How about seven o'clock this evening?"

"Fine. I'll meet you at the dispensary at seven."

Bill walked back to his cottage. Things were happening with blinding speed. One thing piled up on another so fast, it hardly gave him time to think. Suddenly, the weariness of the past few hours descended upon him and he put off thinking about anything. He fell into a deep sleep that did not allow him to dream.

He awoke refreshed in about five hours. He dressed and started his packing, leaving out just the things he would need the next day. At six o'clock he went into the messhall and ordered dinner.

He considered asking permission to see Kutt the next day, but decided against it for fear he would be refused. If he disobeyed a direct order he would be in real trouble. On the other hand, merely paying a call on a friend of his would not be interpreted as a breach of security.

Promptly at seven o'clock, he walked into the dis-

pensary, where he found the major waiting for him. He conducted a thorough examination, which showed the major's reactions normal considering his exposure, and proceeded to administer the scheduled shots. He checked to make sure that the major was adhering to the standard diet, and made an appointment for the following morning at nine.

Bill whiled away the evening hours at the officers' club. Several of the members came up and remarked that they had heard he was doing important work on the antisuss drug. He accepted their congratulations graciously but, not knowing how much they knew of the results, he volunteered nothing.

In his moments alone, Bill thought of the coming trip home. He looked forward to seeing Eddie Watkins again. They would have a lot to talk over. Maybe Eddie would know something of what was going on. After all, General Watkins must be in on it. At the same time, Bill felt very bad at having to say good-by to Kutt, and not being able to explain.

He turned in at ten o'clock, and fell asleep thinking that by the same time next day he would be flashing through space toward Earth and home.

The next morning after breakfast he met with the major again, and, following an examination, he administered the treatment. He was glad when he was able to leave without being asked what his plans for the day were. He headed immediately for the beach and was very pleased to find Kutt waiting there.

"Hi, stranger," Kutt greeted him cheerily. "Glad you could make it."

Bill looked at him, puzzled. "How did you know I was coming down today?" he asked.

"When I heard you were leaving this evening, I knew you'd be coming to say good-by."

"You knew I was leaving? How?"

"Father mentioned it," Kutt answered airily. "I don't check his sources, but I guess they're pretty accurate."

"Then you know all about why I'm leaving so suddenly and everything?"

"Well, not everything. I know there's to be a meeting and you're going with Major Keller. What the result will be, I don't know any more than you do."

"Oh, Kutt, isn't it awful," Bill moaned. "Who knows what those lamebrains will let themselves be stampeded into doing."

"We must have hope," Kutt returned. "Nothing has happened yet and maybe nothing will. You and I are powerless to intervene; that's what makes it so hard. Believe me, if there were anything, anything at all that I could do to set matters right, I'd do it."

"So would I!" Bill said emphatically, and he meant it.

They spent most of the day together, each trying to cheer the other up, but each feeling the leaden heart that comes when friends are parting. At last the time came for Bill to go, and with renewed promises of everlasting friendship they said a final good-by.

When he reached the crest of the hill and was about to pass out of sight, Bill turned and waved to Kutt, who was lying in the shallow water. He saw the

answering arm raise out of the water. He paused a moment, then abruptly he turned again and walked down the other side of the hill.

For the next few hours he was very busy. He visited the laboratory and cleaned out his workbench. He carefully bottled the remaining Compound 5083 and packed it, along with his copy of the report and his notes. By the time his clothing and personal belongings were packed, it was dinnertime.

Immediately after eating, Bill went to the dispensary and waited for Major Keller. When the major arrived, he submitted to an examination and got his shots. Rolling down his sleeves, he walked out of the building with Bill at his side.

"I've had your things brought from your room. They're being loaded now, so we can just walk over to the field and board."

As they walked in the direction of the ship that was to take them back to Earth, they chatted casually. At one point, Major Keller asked Bill how he had spent the day.

"Oh, I got my things together. I saw Kutt—and that was about all," Bill answered, hoping the subject would be passed over.

"Saw Kutt, eh?" the major probed. "Did you mention that you were leaving Poseida?"

"I never brought the subject up," Bill replied, knowing that his answer was misleading; but, at the same time, it was not technically a lie. Kutt had brought the subject up, not he. It would be difficult to explain to Major Keller why it was that talking to

Kutt could not be considered a security breach. Luckily the conversation did not linger on the subject, and soon they came to the edge of the field.

A few words to the sentry cleared them for entry, and Lieutenant Burns came running up to the gate. He had been supervising the loading of baggage and the clearance of the voluminous paperwork. He greeted both the major and Bill and led the way to the ship, threading a path through and around the vehicles buzzing angrily on their appointed tasks. Men with loading schedules hurried here and there, checking and doublechecking. The entry ramp was already attached to the great ship, and floodlights burned away the darkness around its base.

As they reached the ramp, Lieutenant Burns shook hands with both of them and wished them a pleasant journey. Major Keller thanked him for the efficient way he had arranged for everything, and the two officers exchanged a crackling salute.

Bill and the major proceeded up the ramp. As they stepped through the hatchway, the copilot smiled and welcomed them aboard. He showed them to their seats in the already half-filled cabin.

In a few minutes, the outer door pressed itself closed and the pressure machinery could be heard. A tapping noise came from the central cabin loud-speaker, followed by a voice.

"This is Captain Gray speaking. Welcome aboard. I know that no one here is making his first trip, in view of the direction this flight is taking; however, I would like to review a few points."

The voice droned on as the seats converted into horizontal beds and the attendants worked their way down the cabin, attaching metal soles and securing the straps.

Captain Gray's voice stopped, and there was a moment of silence as the nose of the big ship was slowly swung away from the ground. They hung there for a minute and then they were off. The strain of acceleration taxed the straps and pressed itself against the feet of the passengers for a few seconds and then tapered off.

Bill glanced at the projectograph screen and saw the welcome word, "Spaceborne." They were on their way home!

Chapter 10 *The Automatic Sentry*

THROUGHOUT the flight, Major Keller seemed pre-occupied. He carried a briefcase open on his lap and pored over the papers, making notes here and there. Occasionally, he would set the folders aside and make some brief comment to Bill. Obviously, the impending meeting weighed heavily on his mind.

Bill knew that the major liked the Poseidans and didn't think of them as enemies, but, steeped in the military tradition as he was, he would follow orders to the letter. Under the circumstances, Bill could not reveal the knowledge that he had gained through his talks with Kutt. Instead he let the major do most of the talking, agreeing politely where he thought it was desired. Best to keep his mouth shut and his eyes open; then if the opportunity ever presented itself, he would act. His head ached when he tried to imagine just what sort of opportunity would occur or exactly how he could act. There didn't seem to be any way he could figure out to change the course of events. And yet—he had found the antisuss drug, when that

didn't seem possible. So who could tell what the future might bring?

When the bell rang, announcing that the landing was imminent, Bill's heart jumped. Even though he hadn't been away for more than a dozen weeks, he felt it had been much longer. It's always great to get back home, and as they landed, his excitement grew. His impatience mounted at every delay. The endless detail of checking in irritated him, and he was glad when they finally headed for the main gate of the spaceport.

The normal bustle that attended every landing crowded the area of the gate. They were to take the monorail, which arched high over the terrain in a graceful line, direct to Headquarters. As they made their way through the crowd toward the gondola which had been lowered on cables from the overhead rail, Bill's pulse quickened to hear his name called.

"Bill! Hey, Bill! Wake up!"

He turned to see Eddie pushing through the crowd, muttering apologies right and left and bellowing at Bill at the top of his voice. He was in uniform, but his cap had been knocked askew, and in general he presented a comic appearance—but no sight could have been more welcome to Bill.

Major Keller had turned, attracted by the commotion. As Eddie came panting up, Bill asked the major whether it would be all right to delay a few minutes to greet his buddy. Permission was granted readily, and just in time, for Eddie had already reached their side.

"Why you old son of a space cock," he roared. "How've you been? Let me look at you." He lifted both Bill's arms in turn, pretending to look under them in a mock examination. "Yep, just two of them. Good. I thought maybe you'd have grown another couple of sets. You know, like Poseidans."

Eddie laughed irrepressibly at his own joke, and Bill wore a wide smile at the antics of his friend. Then he remembered the major standing beside them, taking in the scene. The older officer was finding it hard to keep a straight face.

"Major Keller, I would like you to meet my old friend, Eddie . . . I mean Cadet . . ." As he spoke his eye was caught by the epaulets gleaming on Eddie's shoulders. They no longer bore the single thin stripe of a cadet. Instead, the crossed diagonals of a sub-lieutenant announced that the wearer was a commissioned officer. So low in rank that it was barely recognized, but an officer nonetheless. "Sublieutenant Watkins, I guess," he ended lamely.

"That's right, boy," Eddie broke in. "I just received my commission two days ago. Things have been happening, you know. Wait'll I tell you . . . oops!" Suddenly Eddie realized he had just been introduced to a full major and had ignored him. He broke off in midsentence and snapped to attention, throwing a magnificent salute—which would have had much greater effect if the cap from which the salute originated had not been draped over one ear and in danger of falling off entirely.

The major returned the salute with a practiced

casualness, and a smile played around the edges of his mouth as he suggested that Sublieutenant Watkins might care to accompany them to Headquarters.

The three of them climbed into the gondola. The cables raised the car, attached it to the wheel assembly, and, with a gentle lurch, sent them speeding down the track.

At Headquarters, Eddie remained in the visitors' lounge while Major Keller and Bill checked in. They went directly to their suite.

The main door opened into a little hallway, which in turn had one door on the left and two on the right. The left-hand door led to a large room furnished as a combination conference and sitting room. Beyond that was a bedroom, and here the major had his luggage placed. To the right of the hall, one room turned out to be a bedroom, with its own bath. Here Bill's things were put down. The other door opened into a miniature laboratory-doctor's office.

As soon as they had done their preliminary unpacking, Bill went into the laboratory room and completed an examination of the major. He administered the necessary shots, and as the major was rolling down his sleeves he remarked that inasmuch as he would have to make a series of calls on his superior officers, Bill was free to do whatever he wanted until evening.

"Don't lose your pass or forget to take it with you," he admonished. "You won't get into or out of the area without it."

Bill assured him that the pass would be with him at all times, then raced downstairs to his friend.

Eddie unfolded himself from the big, comfortable leather chair and rose to his feet as Bill entered the lounge. "So you finally made it," he said.

Bill explained about Major Keller's condition, and that he had had to give him a treatment.

"Oh, yes, Dad told me about it when he told me you were coming back. But I thought you'd already begun the Concourse meeting, the amount of time you took."

"Well, it's all over with," Bill laughed, "and I've got all day. How about you?"

"Special leave," Eddie grinned. "Let's go over to my place where we can talk."

"Your place? Do you live around here now?"

"Sure. You've never been to World Headquarters before—I'll give you a rough idea of the layout. Here, look." He pulled a piece of paper from the breast pocket of his tunic, and unfolded it to reveal a map. The general outline showed it to be a five-sided area, a pentagon.

"This whole region is called World Headquarters. The building we're in is the Residence Building, but most people refer to it as the nest. This big thing here," his finger pointed out a large area outlined on the map, "is the Council Building. Those long buildings next to it are the guards' barracks. These are the storerooms. Communications here. And here, you see this corner marked off? That's me."

"You mean you're in command of that entire section?"

"Well, not exactly in command. You see that's the

experimental spacestrip, and I'm assigned to guard duty there. You've heard of the latest disaster?"

"Yes, just a couple of days ago."

"That's right. That's how I got my commission. It was decided that from now on, no one below commissioned rank can even enter the area. So, since Dad had moved into the nest, and they were short of commissioned officers, they upped my commissioning date and I was ordered here. Great, isn't it?"

"It sure is," Bill agreed. "Do you actually live in the area?"

"Right in it. Got a nice place, too. Ground floor room."

"In that case, let's pick someplace else. I don't have a special area pass."

"Oh, that's okay. I'm allowed to have guests as long as they have a Headquarters pass. Naturally I am responsible—but somehow you don't look like a spy. Come on, let's get over to where we can talk in comfort."

They left the Residence Building, and, with Eddie leading the way, they soon arrived at the spacestrip. It was entirely walled in, the only break in the high barrier being a closetlike room which seemed to be completely lined with steel. There was no sign of a guard, and Eddie pulled no pass out of his pocket.

Bill's curiosity was aroused, and he asked, "What do you do, press a button to call the sentry?"

"No," Eddie laughed, as he pointed at the steel room, "that's the sentry."

"It's empty."

"Sure it is. That's the Sentrac. The automatic sentry. Here, give me your pass. Now watch."

Eddie stepped into the tiny room, and in his normal talking voice spoke to what appeared to be a blank wall.

"Sublieutenant Edward Watkins and one guest." Then, reading the top two lines of Bill's pass: "Medical Cadet William Hudson, Aide to Major John J. Keller. My guest will precede me."

As he finished, he stepped out of the room and told Bill to go in. "Just step right through. I'll be right behind you."

Bill walked into the closetlike affair and stood there wondering.

"Just read off the top two lines of your pass," Ed called.

He did so, and immediately a steel panel dropped, sealing him off from Eddie and the outside. At the same time, the steel wall in front of him slid upward, and he stepped through the space. He was inside the spacestrip area. He turned in bewilderment, to see that the wall had again dropped into place. In a moment it opened again and Eddie came through.

"That's pretty impressive, all right," Bill said, "but it doesn't seem very effective. Why, anybody could come up and say, 'I'm Sublieutenant Watkins, Open Sesame!'"

"Not by a long shot, they couldn't," Eddie laughed. "Well, how . . ."

"I'll tell you all about it when we get to my place, right over there," he pointed. "See, these buildings

surround the strip itself, and all guards assigned to duty here live in them. If the alarm sounds, every man in the barracks, whether on duty or not, immediately goes to a predetermined spot. Why, a flea couldn't get past us."

They turned into one of the long, low buildings. Just inside the entrance, Eddie opened a door on the right and motioned Bill in.

"Welcome to the Watkins Wigwam," he said.

Bill entered and looked around. A good-sized room, he could see. A comfortable-looking bunk and a chest of drawers were at one end, and across the room, over by the window, stood a table with chairs around it. The two of them walked over to the table and sat down.

"Super," said Bill. "A great layout."

"You like it?"

"Sure do. Now, tell me about that Sent . . . the automatic sentry."

"Sentrac, you mean. It's quite simple, really. The idea is that first you register yourself on the electronic brain. This records the way you look just the way a telecamera picks up your image and transmits it. You realize no two people photograph exactly alike. To an electronic eye, even the look-alikes seem completely different.

"Then it records your voice; again, electronically it can differentiate between two voices that cannot be told apart by the human ear.

"Finally, the brain records your smell. Eating onions won't fool it, because it records your individual

body smell. Like your dog—he'd recognize you no matter what you ate, only no dog's nose could match the electronic brain's sensitivity.

"You record all this under the supervision of the security officer. Every day he checks a list of those authorized to enter or leave the base, and those tapes are stored in the electronic brain.

"Now when someone stands in the room and says, 'Hello, I'm Joe from Kokomo,' the brain searches its file and sees if that name is registered. If it is, it flashes the correct sound, sight and smell to its various senses and checks these against the person standing in the room. If the name isn't registered or if the wrong person is standing there, the alarm sounds. The person in the room doesn't hear it, but we do. When I announced that I had a guest, that fact was recorded, but you weren't admitted until you repeated the information. Now if you were not an authorized person, it would be discovered in the morning, since Sentrac automatically recorded your sight, sound and smell. So you see, it would never have admitted you if I, a registered person, hadn't set you up—and if I set up an unauthorized person, I'd be in hot water. That's all there is to it."

"I have definitely changed my mind," Bill said. "It does seem effective. Wait a minute—suppose some enemy had you under control, couldn't he force you to pass him in? I know it would be found at check time, but in the meantime he could have completed his mission."

"Aha, a good point. But if my voice is not at normal

pitch, and under pressure it definitely would not be, the alarm would sound. As a matter of fact, if any of the personnel here have a cold or anything, they're confined to the area until a check shows their voice is normal. Every now and then some meathcad who's late reporting in comes running up to Sentrac and, out of breath, tries to get through. The alarm sounds and he is immediately surrounded by the entire corps. He finds himself with extra duty for a week."

"It sure sounds foolproof."

"It's as foolproof as they can make it, and that's plenty. Believe me, we need every kind of protection. The way those Poseidans seem to be able to slip by every obstacle we erect. You know they got to that ship a couple of days ago; right now another one is almost ready for the final test. The XL-35 this one is. They built it, took it apart and put it together again twice. It's just been reassembled for the third time, and you can bet there'll be no question of mechanical failure. The test pilot will be picked from the group now practicing. You know they have a dummy control room rigged up in a hangar, and all those test pilots do is practice flying that thing. All day long, they take turns 'flying' and preparing for any emergency. The XL-35 has a new alarm system and, brother, if the Poseidans want to get this one, they're going to have their work cut out for them."

"I gather you still think that Poseidan saboteurs have been responsible for the disasters of the XL models," Bill ventured.

"Well, don't you?" asked Eddie incredulously.

"I do not! I not only don't think so, I know they aren't responsible."

"Billy boy," Eddie said with mock sympathy, "you're sick. Maybe a touch of Poseidan sun. Would you like to lie down till the feeling passes?"

He waved his arm toward the bed, and Bill had to smile.

"To begin with, I met Kutt and got to know him very well. He's . . ."

"I know, he's the guy whose life you saved."

"Well, I don't know about saving his life, but I helped him, and we became very good friends. His father is Delu, and I met him, too. I can tell you that they're not in the least bit interested in our XL ships. The thing is just as much a mystery to them as it is to us."

"You really believe that?" Ed asked seriously.

Bill was in a quandary. He was desperately anxious to tell Eddie all about his talks with Kutt, but he had given his promise never to reveal a word of their secret conversations. He had to content himself with telling Eddie as much about Kutt as he could without violating his promise.

On his part, Eddie had a great respect for his friend's wisdom, and he sensed that Bill was holding something back. He felt that Bill had discovered something and for some reason didn't want to talk about it, so he didn't press him.

Instead, he said, "You sure sound convinced. Until anyone comes along to prove you wrong, I'll go along

with you!" Then he added hastily, "Of course, I've got my job to do."

"You don't have to worry about anything," Bill replied earnestly. "You do your job of guarding that ship to the best of your ability. If you see anything suspicious, jump on it—and I'll bet my life that it won't be anything connected with a Poseidan."

Bill felt warmly grateful to Eddie. It was just like his friend to display such loyalty, and Bill was touched.

There was a twinkle in Eddie's eye, as he said, "Of course, I'll go along with you, but I've an idea Glussan might disagree with your views."

"Him!" Bill spat in disgust. "You know, I've come to the conclusion that he has some reason for stirring up this turmoil. I mean a personal reason. If he didn't stand to gain something, he'd never go to all the trouble of making speeches and ranting against the Poseidans the way he does. Now this World Concourse meeting, I wish we could find out what his real motive is!"

The boys continued to talk, catching up on what had happened to each of them during the previous couple of months. Then Bill jumped up.

"I've got to get back. Major Keller's probably waiting for me now, to give him his shots."

"Take it easy," Eddie countered. "If we run, we'll kind of confuse Sentrac at the exit door—and you wouldn't want to turn out the guard, would you?"

"I should say not!"

As they walked toward the exit, Bill asked, "Say, how do I get in touch with you? You can always reach me at the nest, but how do I get by that robot?"

"That's easy. Just step into the booth and announce that you are calling for Sublieutenant Watkins. It will relay the information right to my room and the guard-room as well. In either case, I'll get the message—and if I'm on duty, someone will come and tell you."

As they reached the Sentrac, Eddie stepped in and announced the departure of his guest. Having identified him as authorized, Eddie got out and shook hands with Bill, who then took his place in the steel room. One panel shut him off from his friend, and the other opened up. He walked out and hurried toward the Residence Building.

Chapter 11 *Crisis at the Concourse*

MAJOR KELLER was working at the big table in the conference room when Bill opened the door to their suite. Papers were strewn on the table around him. He seemed tired and worn and barely looked up as Bill entered and headed for the laboratory.

Bill washed his hands thoroughly, prepared the syringe, and was about to ask the major whether he could come in for the examination when the officer came through the door unbuttoning his sleeve.

Completing the treatment, Bill said, "You're a bit run down, sir. Looks as though you'll have to take it a little easy."

The major passed his hand over his brow wearily. "There's no time for that, I'm afraid."

"You can't tell that to your body," Bill said pleasantly but firmly. "It sort of makes these decisions itself and then you just have to *find* the time."

"Look here, you simply have to keep me going. As a doctor I agree with you; I know your diagnosis is correct and normally I'd follow your advice, but

we're in the middle of a crisis here and I've got to see it through."

"Yes, sir. We'll do the best we can. I take it things aren't going well." This last he ventured as casually as he could. He had no business probing these affairs and he wanted it to sound as much like a statement as a question.

The major took no exception, however. He just shook his head and muttered, "Bad? If they were any worse, we'd . . ." His voice trailed off as he left the laboratory. As he sat at his table again, he called Bill.

"You're going to keep working on the antisuss thing, aren't you?"

Bill's eyes lit up. "Why, yes, sir, if I can."

"Sure. You've got the lab. You can order anything you need and there's going to be a corpsman on duty here to help you. So give it as much time as you feel like." This was very good news to Bill. He had not looked forward just to hanging around, with nothing to do except for these brief moments morning and evening. With the situation going to pieces all around him, he had no wish to stand idly on the sidelines, so he took Major Keller at his word and set up an experimental bench in the laboratory.

His aim was to refine the antisuss compound into a stable, uniform potion. He had to work out a reliable dosage, so that a doctor could prescribe the correct amount needed to counteract a given quantity of suspended animation. But first he had to determine its fitness for human consumption.

There was work aplenty at hand, so when Major Keller left after his treatment the next morning, Bill was glad to welcome Medical Corpsman Brad Short. Even before the corpsman introduced himself, it was easy to see why everybody called him "Red." He announced this fact with a grin and suggested that Bill could save himself trouble and do the same.

"Okay, Red," Bill answered. "Have you had any experience as a research technician?"

"Oh, sure. That's all I've been doing for the last couple of years. I've been with one research project or another for as long as I've been in the corps, sir." He said "sir" as if inquiring whether Bill was a stickler for form and would prefer that military etiquette be observed. Bill's answer was quick in coming.

"You can drop the 'sir,' Red. We're here to do a job and we're going to have to work pretty closely, if we're going to get anywhere in the little time we have."

"Suits me. Just brief me on what you're doing and how I can help and we're in business," Red said, breaking into a friendly smile.

The rest of the day was spent in bringing the corpsman up to date on what had happened, and between them they outlined the following day's work. Bill gave him a list of supplies and told him to bring them in when reporting for work in the morning.

After Brad had left, Bill set about preparing the laboratory for the project. He was engaged in this when Major Keller returned. Bill stuck his head out

the door of the laboratory as he heard the major walk into the sitting room. The older man showed the marks of heavy strain. The lines on his face were deeply etched by fatigue and there was no expression as he slumped heavily into an armchair. Bill found him staring at the base of the wall across the room. They remained that way for a few moments, Bill standing patiently, not wanting to intrude on the thoughts obviously weighing on the major's mind, the major staring across the room, seeming oblivious to the presence of his young aide. Then he stirred and said loudly and emphatically, "The idiots!"

"Yes, sir."

"The pie-brained, misanthropic idiots!"

"Yes, sir."

"What?" The major snapped his head up and for the first time seemed to recognize Bill's presence. "Oh, it's you," he said.

"Yes, sir."

"Well, they are idiots. Why, do you know what those flea-minded addlepates are up to?"

"No, sir. Hardly," Bill replied, not knowing what to make of this.

The major did not normally go around talking about his superiors in such terms and maybe his illness had taken a larger toll than either of them realized.

"No, of course you don't. You weren't at the meeting of the World Concourse." His voice softened and assumed a more reasonable tone. "Bill, I know I shouldn't talk like this to anyone, and especially not

to a young fellow like you, who might get the wrong idea, but I feel I can trust you and if I don't talk to someone, I'm afraid I'll blow my top. Those vacant-headed numskulls are debating whether to declare immediate war."

"Oh, no!" Involuntarily, the words burst from Bill's horrified lips.

"There isn't a man alive who has been through a war," Major Keller continued. "They've played at it in maneuvers but they haven't the foggiest idea what real war is. When they find out that there isn't any umpire to blow his whistle and call off the game at the end of the day, so they can spend the night sitting around telling each other what geniuses they are, they'll wish they hadn't been so hasty."

"Do you think they'll actually vote war, sir?" Bill asked, dizzy at the thought.

"Who knows?" the major replied, spreading his palms in a gesture of despair, then went on slowly. "If it hadn't been for General Watkins they might have gone through with it today. He stopped things by saying that before any vote could be taken the Concourse would need a complete report on the state of Planet Earth's Forces. He wasn't prepared to give such a report today but it would be ready for tomorrow's session. He gained us a day, but as to what happens tomorrow . . ." He shrugged.

"Are all the Proctors in favor of war?" Bill asked incredulously.

"The largest part of them are tectering in their accustomed spots, smack-dab on the fence. A group

of honest, intelligent men, one of whom is General Watkins, is trying to ride out the tempest and swing it to a more constructive end, but a few hotheaded simpletons, headed by Proctor Glussan, are whooping it up for immediate hostilities. You know the fence-sitters are always pulled along by the loudest noise."

"Isn't there anything you can do, sir?" Bill's anxiety was betrayed by his voice, which was pitched higher than usual.

"No, son, there isn't," the major said wearily. "I'm not even a member of the Concourse. I'm there only because they want me as an expert witness. They're going to have me testify on something or other but they haven't told me what so far. That's the worst part of it. No matter what those idiots finally decide, I shall be given my orders and I'll have no recourse but to follow them."

Bill fought hard, trying to control the surging emotions which threatened to destroy his outward calm. A declaration of war would be catastrophic. These men didn't know of the Poseidan Tower of Life. They were not aware that the secret of Bill's departure from Poseida had not been a secret to Dclu. But, even aside from the fact that he had been sworn to secrecy by Kutt, what could he do? If he should decide to cast aside the restraining force of his oath, would the Concourse, and particularly Proctor Glussan and his henchmen, take him seriously? It didn't seem likely. They would question him as to

how he had obtained the information he claimed was true. They would dismiss it all as a pack of lies and probably arrest him for having consorted with the enemy, to boot. These were not reasonable men.

The silence was broken by Major Keller as he rose to his feet. "There, there, son, these are not your problems, or mine either, for that matter. Ours not to reason why, ours but to do and die, eh?" the major misquoted. "Now if you're ready for me, shall we get on with the examination?"

"Yes, sir, right away."

All night Bill tossed and turned, sleeping fitfully, as the awful news imparted by the major crossed and recrossed his mind. He was up early and entered the laboratory glad of the work awaiting him. At least he could bury his thoughts in such a welter of action that his aching head would forget the larger anxieties. Major Keller joined him briefly for the routine shots and again Bill warned him to ease off, knowing that his advice would not be taken.

Shortly after the major had departed, Red arrived, carrying two big containers. He set these down and checked their contents against the list Bill had given him. Everything was in order, and the serious business of the day was begun. As the morning wore on, Red's experience in laboratory procedure showed itself, and Bill was grateful for the quick, sure assistance which enabled him to proceed at a fast pace.

In midafternoon, Bill poured a carefully measured quantity of white powder into the funnel of the

miniature hydropress and watched as the mold accepted the powder, compressed it and swung open to reveal six round, white pills. He extracted the pellets and held them in the open palm of his hand.

Red stared in awe for a moment and said, "Think of it. Those are the first antisuss pills ever made, and in a few years they will probably be made by the thousands and no one will think anything of ordering them."

"They're the first pills of this type, all right," Bill replied, "but I wouldn't exactly say that they are antisuss pills."

"Well, what are they then? Don't they counteract the effects of suspended animation?"

"That's what they are supposed to do. That's what their ingredients do for guinea pigs."

"Then they *are* antisuss pills," Red said in relief. He had begun to wonder if he had misunderstood the whole purpose of their work.

"You can't go jumping to conclusions, Red. We know what the ingredients do. We have compounded these pills according to carefully calculated figures, so that each one is supposed to counteract the effect of one year's suspension of animation in a man. Do they actually do that?"

"They certainly do, if your figures are correct."

"There is no room for guessing. We have to be positive." With that, Bill reached up and took a small phial from an overhead shelf. He extracted the stopper and allowed one of the little red pills to roll into his cupped hand. He replaced the stopper and

put the phial back on the shelf. Holding the red pill between the thumb and forefinger of his left hand, and a white one in the same manner in his right hand, he said, "This red tablet will put me into a state of suspended animation for one year. The white one will, if our calculations are correct, exactly counteract the effects of the red pill. Now there is only one way to determine whether it really works, isn't there?"

"You don't mean you're going to . . ."

"I am. I'm going to take first one and then the other. If nothing happens and I remain perfectly normal, we'll have definite proof that these are what you just called them, antisuss pills."

"You can't just take them like that!" Red's voice rose in alarm. "Suppose . . ."

Bill laughed at the dismay on the corpsman's face. "Suppose what? Didn't you just say they were antisuss pills? A minute ago you were telling me that they worked."

"I said, 'if your figures are correct.'"

"You don't think they are?" Bill teased him.

"It's not that. They're probably accurate all right, it's only . . . oh, I don't know," he ended lamely.

"Don't you see," Bill said as he turned serious, "somebody actually has to take one in order to prove their worth. If I have made all the calculations and made the pill, how can I ask anyone else to try it, on the grounds that I am afraid to try out my own handiwork?"

Red brightened. "That's easy. I'll try it out. I'll be glad to take the stuff. If it doesn't work, I won't mind

sleeping nice and soundly for a year." He stretched and opened his mouth in a long, wide yawn. "Not bad at all. No duty, full pay. I'll take the pill—gladly!"

Bill realized that this flame-haired corpsman was acting the comic merely to cover up a heroic offer, so he smiled as he said, "Thanks, Red. But this has to be my show. Now I'll take a complete metabolism. You keep the record and we'll both check."

After a complete examination, which recorded every phase of his basal metabolism, the energy he was expending in merely carrying out the life process was measured. If, after taking both drugs, it was found that the energy output was lowered, it would be determined that the antisuss drug was not counteracting the induced suspended animation. Any stepping up of his energy output would mean that his antisuss pill was too powerful. With everything ready, he drew a glass of water and, with a smile and a small shrug, he swallowed a red pill and followed it quickly with a white one.

"Well, we'll soon know," he said.

Red stared at him in a sort of horrified fascination, as if expecting some great change to take place.

After standing five minutes of the relentless gaze, Bill broke the silence. They chatted, making smalltalk in order to keep their minds from dwelling on the experiment which was taking place. Over an hour passed, as the two strained to keep the conversation from drifting toward the subject that was uppermost in both their minds.

At last Bill slapped both his knees and said, "Well, this is it. If any change were going to occur, it would have taken place by now. Let's check on it."

Carefully, in controlled excitement, the basal metabolism tests were rerun and the results compared with the original figures.

"It works!" Bill expressed his huge delight simply—a smile played over his features as he realized that there had been no change whatsoever in his energy output.

Red let out a couple of whoops and pounded Bill on the back before regaining a small measure of dignity. Bill restrained the enthusiasm by reminding his helper that because one pill worked one time on one man, it did not mean the entire problem was solved. There still had to be a long series of tests, but these could now be turned over to the regular research department. He carefully placed the remaining five pills in a small phial and put them on the overhead shelf containing the other drugs.

Together they straightened out the laboratory, putting the equipment back in place, and Bill told Red that he was through for the day. The corpsman congratulated Bill again and told him that he would be in first thing in the morning.

The major came in late that evening. Bill, bursting with his good news, was restrained from talking by the air of complete fatigue the man showed. Major Keller asked Bill to dispense with the examination

and just to give him the regular shot. He explained that no matter what the examination showed, he would have to return to the Concourse meeting early next morning, so skipping this one would make no real difference.

Bill did not add to the major's troubled mind by arguing, but administered the shot at once.

As they returned to the sitting room, the major smashed his fist into his hand and said, "Those crazy fools are going to do it. I really believe they're going to do it!"

"Things still bad, sir?" Bill inquired softly.

"Yes, son, they're as bad as they can get, I'm afraid. General Watkins began his report today. I believe he is trying to underplay our actual military strength in order not to add fuel to the fire, but he has to tell the truth, of course, and so far, the mere statement of our forces is inflaming the Glissan group. They're telling all who will listen that we're strong enough to win any war, so that we don't have to stand for any more nonsense. They want to attack immediately.

"The meeting was finally adjourned at the general's request, but we convene again in the morning. At that time General Watkins will complete his report, then I will be asked to testify and then . . . and then a vote will be taken. The proposal will be worded to the effect that, if it should pass, an immediate and total state of war will exist between Poseida and ourselves."

Bill's heart sank. "Did they tell you what they

wanted to ask you, sir?" he asked, grasping at a slight hope. "Maybe after you testify . . ."

"No, they haven't told me, exactly, but I don't believe that anything I can tell them would cure their madness. I'm afraid it's hopeless. By this time tomorrow," he lowered his voice to conceal the tremble, "by this time tomorrow, we may be at war!"

Chapter 12 A Momentous Decision

THE TWO MEN spoke very little throughout the evening and both retired early. The major sank into a dreamless sleep of exhaustion while Bill tossed on his own bed. Under normal conditions, the great good news of his day's accomplishment would have meant rejoicing, but all notions of pride and satisfaction were swept aside in the swift turmoil of his troubled thoughts. Time was running out. If anything could be done, it had to be done now. But what? Ideas coursed through his tired mind in wild sequence.

Nothing came from the welter of desperate plans that half shaped themselves in the darkened room, but somehow Bill knew that in some way, if war could no longer be avoided, he would do something. He would not just stand idly by while disaster engulfed them all.

The first dim rays of dawn were showing in the east when he finally dozed off, and he was dismayed to be awakened by Brad Short reporting for duty. His first thought was of the major and he rushed into

the other bedroom, only to discover that Major Keller had already left. This was bad. Last night there had been no examination made of the man and this morning he had not had his shot. Cosmic radiation was not a serious malady if kept under strict control through proper treatment, but let it get out of hand, and it could take a man apart in no time.

Hurriedly Bill struggled into his clothes and went into the laboratory. He prepared a dose and loaded a syringe, placing it in a little carrying case. Then he gave Red perfunctory instructions, asking him to tidy up, straighten out the drug supplies, anything just to keep busy. Carrying the syringe, he headed for the Concourse Building to find Major Keller and treat him on the spot if necessary. On the way over he was not sure whether he would be able to gain admission to the building, but it turned out to be no problem at all. His pass, identifying him as an aide to Major Keller, was enough to allow him into the building, and guarding the main entrance to the huge Concourse Room itself was none other than Eddie Watkins.

A hurried whispered conversation ensued while Bill explained that the major was in danger of a serious relapse unless he received the contents of the syringe. Eddie told him to go in, but to remain in the observers' gallery, and word would be passed to the major seated below.

"I'm going off duty in fifteen minutes," Eddie confided. "Can you come over to my place when you're through here?"

"I'll come as soon as I get out," Bill answered fervently. "I've got to talk to you. It's most important."

Eddie nodded and opened the door leading to the gallery. Bill passed through and climbed the stairs. As he stepped into the gallery, he could see that the floor of the house was packed. There was not a vacant chair in the horseshoe-shaped chamber. On the raised platform supporting the witness table, General Watkins sat, leaning forward as he talked into the microphone in front of him. Bill's eyes, traveling over the sea of faces below him, could not pick out the features of Major Keller, so he seated himself and waited for word to be brought to him. He gave his attention to the general's words.

". . . It is therefore ironically true," the voice boomed out of the loudspeakers scattered throughout the Concourse Room, "that our strong point is also our weak point. Since our engines of war were for the most part converted to the use of rhyllium, we have achieved greater power and increased speed. The scarcity of rhyllium on this planet, however, has created great difficulties in the stockpiling of this material. Large quantities are, of course, to be found on Poseida, but under the terms of our Mutual Trade Pact, which strictly limits the amount of any particular element allowed for export, we have not been in a position to stockpile the quantity of rhyllium that would be required in a long-drawn-out period of hostilities.

"The Poseidans inform us, and our intelligence would appear to verify their statements, that they

themselves do not use this critical element to any great extent, so we may assume that our craft, even excluding the unfortunate XL series, are faster and more powerful than anything the Poseidans manufacture in quantity. However, this would remain true for only such a period as our supply of rhyllium holds out.

"We produce sufficient quantities to operate our entire forces under conditions of peace. Our stockpile has been created entirely by import from Poseida. We must naturally assume that these imports would cease immediately upon the commencement of hostilities and at the same time that our need would be far greater under combat conditions. I can state to you now, gentlemen, that our present supplies of rhyllium would not support an intensive campaign of longer than six months. At the end of that time, our military activities would of necessity be severely curtailed."

Bill's eyes sought out Proctor Glissan, and his intense dislike of the man was doubled when he saw a faint smile curling the fat lips of the leader of the war party.

The heavy-set Proctor pressed the button, lighting the red lamp on his desk which indicated he wanted the floor, and then in his customary fashion did not wait for permission to speak but launched directly into his address.

"Thank you for a very detailed report, General. I'm sure I speak for all of my colleagues when I express my gratitude for your very capable handling

of this difficult situation." It was a clever tactic. Under the pretense of praising the general, who was highly respected, he was in fact dismissing him. The white-haired officer looked about him with a sense of confusion. Although he had intended to add to what he had already said, he saw that Proctor Glussan had the floor and had no intention of relinquishing it. To remain on the stand might give the impression that he agreed with what the Proctor was saying and he had no wish to be placed in that position, so, gathering the papers from the table in front of him, he stuffed them into his briefcase and left the stand, taking his place among the delegation of officers.

As Glussan's voice droned through the chamber, a messenger handed Bill a note.

Thanks for your thoughtfulness. I gave myself the shots before I left this morning, so there is no need to worry. If you wish to remain and view these proceedings, you are hereby authorized to do so.

Signed,
J. J. KELLER (Maj.)

Bill read the note and put it in his pocket. He wanted very much to stay, not only because he wished desperately to know the outcome of this momentous meeting, but because, sitting unnoticed in the visitors' gallery, he could think. He had to straighten out his mind and clear his brain. As the world moved closer and closer to calamity, he would make a last-ditch attempt to avert the disaster. His plan was forming, but he needed time to think it out.

On the floor, Proctor Glussan was saying, ". . . In view of the short-term war which we will conduct, the reserves of rhyllium are more than ample. I should be remiss in my duty to this great Planet Earth, my home, if I did not again declare my wholehearted opposition to the very thought of war. If I believed there was any way to avoid this terrible step and still keep our families and loved ones secure, believe me, I would vote that way. But if we vote here today to remain as sitting ducks, waiting for the blow to fall, too scared to take even elementary steps in defense of our beloved families and homes, we could never answer the accusing eyes of our children as they are marched off in bondage to Poseida, as they surely will be if we do not have the courage to put aside our personal hatred of violence and vote immediate war to defend our planet."

Bill's stomach curdled as he listened. In his mind, he regarded the Proctor's pious words as sheer hypocrisy. He was certain that Glussan had some personal ax to grind. There had to be some reason why he kept hammering on the single theme: immediate war. It was too late now, however, to try to find that reason. Bill felt that the only important thing was to stop the war.

Glussan's voice again caught his ear. ". . . and to confirm our estimate of a very short period of hostilities, I request that the Chairman now call to the stand Major John J. Keller. Major Keller is our senior medical officer, stationed on Poseida. He is intimately acquainted with the Poseidan physical structure and

I should like to ask him a few pertinent questions for your enlightenment before the final vote is taken."

The Chairman sounded his electronic gavel and called Major Keller to the stand. Bill strained forward and saw the major emerge from his seat, which was just under the overhanging gallery. His military bearing showed through his fatigue, and with shoulders thrown back he walked to the witness platform, mounted it and stood while he was sworn in. Then he sat at the table, clasped his hands in front of him and faced the assembly.

Proctor Glussan activated his microphone again. "Major Keller, does the word psilica mean anything to you?"

"Yes, sir, it does," the major answered cautiously.

"Please tell the Concourse what you know about psilica."

"It is a water-soluble poison."

"Yes, Major, of course, but give us a little more detail. Is it harmful to man?"

"Mildly harmful, yes, sir. In other words, if taken internally in sufficient quantity the effect is poisonous and serious illness or even death may result."

"Then you agree that psilica is no more dangerous to man than many elements he uses every day?"

"That is correct." The major would give nothing away. He would answer questions but only that. He would not volunteer a word. As soon as he heard psilica mentioned, he was pretty sure of the course of the interrogation and Glussan's aim had become clear to him, but he would do nothing to help.

But there was no way out. Glussan had laid his plans well and knew the answers to the questions he was putting. He was grandstanding it for the benefit of the assembled Proctors.

"Now, Major, what effect does psilica have on a Poseidan?"

"To a Poseidan it is the deadliest of poisons."

"I see. Please tell the Concourse what would happen if a quantity of psilica were suddenly released into the waters around a group of Poseidans, as might happen, say, at the Poseidan Colony here on Earth."

"Well, you realize that would depend on a number of factors—the quantity released, the number of Poseidans in the area, the currents of water, temperature . . ."

"Come, come, Major, let us not quibble. Tell us in plain language what would happen."

Major Keller's temper flashed. "I was not quibbling, Proctor," he said heatedly, "I was merely trying to point out . . ."

"Of course, Major," Glussan interrupted in a soothing voice, "but you see, we are not doctors and it is therefore not easy for us to follow a technical discussion. Won't you tell us, as laymen, just what would happen to a Poseidan who came into contact with psilica flowing freely in the water?"

"In a case such as you have just outlined, the Poseidan would die." Major Keller knew that Glussan was trying to convince the Concourse that all you had to do was dump psilica in the ocean and wipe out all the Poseidans in their Colony. It might work if the

Poseidans were caught by surprise, but one couldn't be sure of their complete annihilation. He had wanted to stress the unreliability of this method but Glussan had stopped him effectively. These were Glussan's home grounds and no one untrained in his methods could compete against him here. Even General Watkins had been outmaneuvered.

"Is there any known antidote to this poison, from the Poseidan point of view?" Glussan continued his loaded questions.

"If you mean is there any defense . . ." the major countered.

"As a doctor, surely you are familiar with the word antidote, Major. I asked if you knew of any antidote that could be used by a Poseidan which would counteract the effect of his contact with psilica in water?"

"There is none." Glussan had made his point. He smiled confidently as he thanked Major Keller for his competent testimony and dismissed him.

Bill had followed this questioning intently and understood what Glussan was doing. As the Proctor talked on, now in low tones so one had to strain to catch his words, now raising his voice in a roar that reverberated throughout the chamber, he unfolded a scheme which made the planned war appear so easy and simple to win that the vote was practically a guarantee of victory.

According to the plan, all that had to be done, once the vote had been taken, was to send a fleet of spacecraft to Poseida, carrying large quantities of psilica. At a predetermined time, Poseidan waters, as well as

those of the Colony here on Earth, would be saturated with the poison and the war would be won at one stroke. In the event that a few survivors managed to escape, it would be a simple matter to round them up. Forty-eight hours after the vote, this could all be accomplished and the threat hanging over Earth would be banished once and for all.

The plan, as it struck Bill, was horribly effective in its ruthlessness and, with the proper element of surprise, could wreak terrible havoc among the Poseidans. There were many pitfalls in the scheme and Bill was aware of at least two of them, but the assembled Proctors were in a mood to accept victory, and the cheaper and easier the victory could be made to seem, the sooner would they accept the plan.

Before calling for the time-consuming, carefully recorded vote which was mandatory when deciding so serious a question, Proctor Glissan asked for a standing voice vote expressing confidence in his views. He merely wanted to be sure that the war ballot would be passed on the first recorded vote. He wound up with a final impassioned plea for the Proctors to stand now and raise their voices in defense of their homes and the people of the entire Earth whom they were representing. His timing was perfect and his oratory had the hypnotic effect for which he was famed. Almost three-quarters of the Proctors rose to their feet and roared their assent.

Sick to his stomach and disgusted by the bedlam on the floor below him, Bill stood up and passed unnoticed from the building. He knew what he had

to do now and his main obstacle was time. Even minutes were vital, so he did not waste a motion but made straight for Sentrac. It was time for Eddie to be brought in on his plans. They were drastic and they involved his risking everything, even his honor and his life, but this was not the time to weigh risks. If he failed, the situation would not be the worse, and if he succeeded, everything might still be saved. It was a long shot, longer than he dared think, but it was the only hope.

It was a cloudy day and a thin drizzle began falling as Bill arrived at Sentrac. He stepped inside and announced his desire to see Sublieutenant Watkins. He waited calmly. Now that the moment for action was here, he allowed himself no distracting thoughts and he whiled away the few minutes it took Eddie to get to him by going over his plan and trying to spot any errors.

The Sentrac door slid open and Eddie appeared. "Hi! Come on through." Even these friendly words betrayed the feeling of tenseness which gripped his friend. Bill stepped through quickly and, as the door closed behind him, gave Eddie a hurried greeting and said, "Let's go over to your place. I've got to talk to you right away."

Eddie saw an entirely new Bill Hudson. Gone was the usual calm dignity which masked a continuously active brain. In its stead, Eddie saw a grim, tight-lipped youth, whose quick movements bespoke action. He realized at once that here was not Bill Hudson the careful planner, but Bill Hudson the doer. Falling

in swiftly with the urgency which dominated his friend's manner, Eddie started toward his room at double time. When they let themselves in, Bill took a quick glance around and, having assured himself that they were alone, walked over to the table by the window and sat down. Eddie followed and sat opposite him wordlessly, anxious to discover what Bill had to say.

"I'll have to get right to the point, Ed. You know what's going on, don't you?"

"Yes. Have they taken a vote yet?"

"It's going on right now. They took a voice vote just before I left, so it's just a question of time. When they're through, we'll have exactly forty-eight hours."

"Forty-eight hours? I don't understand."

"It'll take them that long to carry out their plan. Forty-eight hours after war is officially voted, our forces will attack. It will be a double-pronged, simultaneous attack, designed to wipe out the Poseidans here and on their planet, too, at the same time."

"You mean massacre every last one of them at one stroke?" Eddie asked incredulously.

"That's the idea. Only it can't possibly work. I know a couple of things that Glussan and his sheeplike followers don't know. I gave my word that I would never reveal what I was told, but I have decided that too much is at stake. Now listen."

Bill went on to relate his conversations with Kutt in detail. He told of the mass-energy transmitter with its deadly ability to pin down every moving thing. He explained how Poseidan intelligence units appar-

ently had discovered his intention to return to Earth and how it was entirely possible that they would know of any plans being formed here as soon as a decision was reached.

"So you see," he concluded, "it's not just that the senseless slaughter of thousands of people like Kutt is terribly, terribly wrong. The truth is, although we may be able to do them great damage, I am convinced we don't stand a chance in the long run. They could pin us down and then finish us off at their leisure. After we had poisoned an entire group of them, you can imagine what mercy we could expect them to show."

The news hit Eddie in the pit of his stomach. It was a great credit to his intelligence that he was able to absorb all Bill had told him and understand the situation clearly. He thought a moment, then said, "This may strike you as being beside the point, but what do you suppose is Glussan's reason for wanting war so badly?"

"It's not beside the point at all," Bill answered. "At the moment, we don't have time to go into his purpose, but I'd bet everything I ever hoped to have that we'll eventually find some personal reason behind it. He doesn't believe half the things he says himself, and I wouldn't be surprised to find that he doesn't believe that the lightning war will succeed in one swoop."

"Is there anything we can do?" Eddie asked. He knew, just as Bill did, that, although they both held secrets of tremendous importance, their knowledge

was virtually useless, inasmuch as they would never be taken seriously if they went straight to the Concourse and divulged the information.

"Yes, Eddie, there is. There is one chance—one thing we must do. We've got to get to Delu, explain the situation to him and have him come down here. If he were to appear before the Concourse in person, I know they would listen to him. Glussan can get them all riled up and stampede them any way he wants them to go, but they still have a great respect for Delu, as you know. If he were to debate the differences between his home and ours with Glussan, right in front of all the Proctors, I'm convinced that the crisis would be over and Glussan would be revealed as nothing but an emptyheaded warmonger."

Eddie was dead serious. "Bill, I believe you're right. The Proctors have allowed themselves to be whipped into such a frenzy they wouldn't know how to stop now, if they wanted to. The sudden appearance of Delu would bring them to their senses all right, and once they were back to normal, he would make them see the light. But, Bill, how could we contact Delu? Or Kutt? All communications will . . ."

"No, we won't be able to use any of the normal lines of communication. We're going to have to go to Poseida ourselves. We'll have to leave tonight."

Eddie was stunned. His friend was obviously in earnest but his proposal wasn't feasible. "We couldn't do that. Why, under the conditions no unofficial passengers will be carried and, besides, we both have our jobs to do. They would never let us go."

"Our jobs are unimportant compared to the real job which we have to do. We have to get Delu down here right away. Forty-eight hours will be too late. He must be here in time to stop the action now being voted upon from being carried out. As to they're letting us go, they won't have the chance to stop us."

"They won't have to *do* anything to stop us. How are we ever going to get to Poseida? Don't you see, we're stuck here, and if they won't give us a space . . ."

"That's the whole point, Eddie; we have no choice but to take a long shot and hope it works. We stand a good chance, but we must act at once. We're just going to have to take a ship and leave without authorization."

"Piracy!" The distress in Eddie's mind expressed itself in the explosive word. "If there were any chance at all that it would work, I'd be for it, but they wouldn't even let us into the spaceport, much less near a ship."

Bill's voice was quiet and even, in contrast to the excitement vibrating in his companion's speech. "When you're not doing special duty at the World Concourse, what's your regular assignment here?"

"Why, I guard the craft right here at the experimental . . . Oh, no!" As the realization of what Bill meant sank in, his voice trailed off and his eyes widened as he looked at the very determined, cool young man across the table.

"It's our only chance, old man. We'll have to take an XL ship tonight!"

Chapter 13 *Thirty Seconds To Go!*

THE THOUGHT pounded through Eddie's brain. Steal an XL ship! It was a fantastic scheme. The dangers were obvious, not merely the actual taking of the ship, but the fact that none of them had ever been successfully flown. On the other hand, he knew the layout and there was no doubt that between them they could effect the seizure of an XL ship. He would be on duty between eight o'clock in the evening and four the next morning and no one would stop him if he chose to approach the craft, or even board it for inspection.

"It might work," he said slowly, "it might just work."

Bill was relieved to see that once the original shock of the plan had worn off, Eddie recovered quickly, and they started discussing the actual details. Every move was charted; several times a particular tactic which had seemed workable had to be revised. Hours passed as they went over and over the plans. By five o'clock the gray, dismal day had darkened into an early night.

Midnight was decided on as the best time for their venture to start, and Bill had just announced that he would be at Sentrac's entrance at that time, when his eye was caught by an indistinct movement outside. He stiffened abruptly but he kept talking in his normal voice while he pulled a notebook and pencil from his pocket. He wrote a hasty note and handed it across to Eddie, meanwhile keeping up his conversation. Eddie looked at the note and froze. Bill had written, "There is someone outside the window!"

Silently, stealthily, Eddie rose and backed away from the table, motioning Bill to keep talking. As Bill droned on, striving to keep some sense in his words so as not to alarm the shadowy listener, Eddie, moving with the lithe grace of an athlete, made his way to the door and, opening it noiselessly, slipped out and took the back exit of the building. Keeping close to the wall, he glided around the corner, and, as he approached his open window, he could hear the low hum of Bill's voice. He could not distinguish the words as he paused behind the shelter of a tree trunk. His eyes became accustomed to the darkness and searched the area directly around his window. The light spilling into the shrubbery created weird shadows and he could see either a hundred figures, or none at all. He had begun to think that Bill must have been mistaken, when a sudden distinct movement of a dark patch betrayed the location of his quarry. Using a principle which he had learned as part of his military training, he averted his eyes and stared at a spot a few feet to one side of the dark

patch. The dim light entering his eyes from the side enabled him to see more clearly. The crouching figure shifted its position slightly as Eddie tensed himself for an overpowering rush. About twenty-five feet separated him from the lurking form and with a sharp cry of "Now!" he charged from behind the tree and flung himself onto the intruder. The totally unexpected attack carried them both to the ground and, as they struggled, Bill leaped through the window to join the fray. Between them, Bill and Eddie had no trouble in subduing their opponent and, with a firm hand clasped over his mouth, he was carried bodily into Eddie's room.

They let him fall onto the bed, Bill holding his feet firmly to prevent any further struggle, although it appeared that the interloper had lost any will to fight. Eddie removed his hand, still holding it ready to clamp back over the stranger's mouth at the first sign of a scream. "Okay," he said savagely, his breath coming hard, "keep your voice low or I'll pulverize you. What were you doing outside my window?"

"I . . . I was just there, that's all." The voice came plaintively. Bill snapped around, letting the feet go.

"Griff! Griff Hughes!" he exclaimed.

"Do you know this buzzard?" Eddie asked in surprise.

"He was on the flight with me to Poseida. He's a messenger," Bill answered.

The slim figure on the bed wriggled sheepishly and pushed back the spectacles which had slid forward onto his nose, giving him the appearance of a be-

wildered grandfather. "It's a small universe," he ventured unhappily.

"Cut the smalltalk," Eddie snarled to the thoroughly scared messenger. "What were you doing outside my window?"

"I've been assigned as messenger for this unit and I was just out for a little walk to get a breath of air. You see when the rain stopped . . ."

"Do you usually take your air in the shrubbery outside an open window?" Eddie broke in angrily.

"Well, no, but you see, when I heard you talking, I naturally . . ."

Eddie interrupted again, impatiently. "You naturally what? How much did you hear?"

Griff lowered his eyes and hesitated. "Enough to know what you're up to," he blurted out and sat bolt upright, "and I want to tell you I'm all for it and I want to go with you!"

Eddie looked at Bill. "Sure," he said, "he's all for it, until he gets out of this room and then he'll hotfoot it over to Headquarters and think he's a big hero."

"No, no!" Griff protested. "I never did believe Poseidans were threatening us. I tell you, I'm on your side. Ask him. He'll tell you." He nodded toward Bill.

"He's telling the truth." Bill confirmed his claim. "At least he spoke in their favor before I had even come to know them at all."

The messenger nodded eagerly. "Look, fellas," he pleaded, "you've got to believe me. I think Glussan is the lowest thing there is and I'd do anything to stop this war. When I heard you talking I just couldn't

help listening, and I was trying to get up enough nerve to come in and tell you I was on your side and wanted to help when you," he rubbed the back of his neck, "when you asked me in."

Eddie looked at Bill quizzically. "What do you think?" he asked.

"Frankly, I believe him. The fact is, we don't have much of a choice. Look here," Bill faced Griff directly and spoke sternly, "you do realize that our proposed mission is the only hope of averting a disastrous war? You don't think we're planning to sell out our own people?"

"Of course not!" Griff returned sincerely. "That's why I want to join you. Don't you see? It's the one big chance I've ever had to do something really important—something I really believe in."

Bill extended his hand. "That's good enough for me," he said simply. Griff grasped his hand and shook it enthusiastically, then turned to Eddie who smiled as he offered his handshake and said, "You're in!"

The three then sat down for a hurried review of plans, filling the newcomer in on the part he had missed. Suddenly Bill clasped his hand to his forehead and groaned. "How could I have been so stupid. We left out the most important thing. The pilot! We've made no plans for one."

"Well, I guess we'll just have to kidnap one of the test pilots and force him to take us," Eddie replied.

"Sure, but we can't leave that till the last minute. What do you know of their movements, Ed?" Bill asked.

"I'm pretty familiar with their routine," Eddie said.

"May I suggest that the piloting of the XL model need cause you gentlemen no concern," Griff remarked. He was returning to normal, and his usual cocky attitude added a pleasant note of relief to the serious planners.

"How do you mean, Griff?" Bill inquired, raising his eyebrows.

"I don't get you," Eddie joined in.

"What I mean," Griff said, studiously inspecting his fingernails, "is that I have done everything but get an official checkout on the XL series. In the course of my duties, I have had contact with many of the test pilots and, after delivering messages, I have been able to hang around and observe. You'd be surprised how little a lowly messenger is noticed. I've heard the pilots being briefed and seen them go through their test runs. I've sweated out many a dry run with the commander of this sector. I've also managed to borrow a blueprint of the latest XL ship and a copy of the operating manual."

"They let you have a blueprint and a manual?" Bill asked incredulously.

"Unofficially, of course," Griff replied. "I did not feel it necessary to inform them of the loan."

"You son of a raygun," Eddie exploded with a look of genuine admiration. "You stole them! Right out from under their noses!"

"Well, that's a rather crude way of putting it, but quite accurate, I'm afraid. It's just that I have always been so interested in the pilot's end of things that I

was curious. I wanted to find out if I could discover what was going wrong."

"Did you run across anything?" Bill asked hopefully.

"To tell you the truth, I've not been able to discover what the fellows who piloted the ships were doing wrong. For that matter we're not sure they all did the same thing. But I am confident that I can operate an XL model and go anywhere I want to safely."

This offered a solution to a problem which might have endangered the whole scheme. Bill and Eddie thought over the possibilities. If Griff really could pilot one of the XL ships, it would simplify the situation. "Listen, Griff," Bill said earnestly, "don't think in terms of what you'd like to do. You know how much is at stake here. Millions of lives may depend on your decision. Now, do you really believe you could get us to Poseida. Remember, you and you alone will be at the controls. Once we blast off, there'll be no one to help you."

"I was never more certain of anything in my life," the bespectacled youth said seriously. "I know I can take that ship to Poseida."

The three exchanged looks and it was agreed. Griff would be the pilot. They chose the XL-35 as their target ship. It was situated at the base of the blastoff tower and hooking it up would take only minutes. Griff outlined the procedure to be followed which would enable the ship to be cut loose by the inboard control system. Eddie would station himself at the

base of the craft shortly before midnight. Griff would wander out and be handy at the Sentrac entrance, and Bill would step into the outside booth at the stroke of twelve. The details agreed upon, they stood up and joined hands. In their hearts the importance of the undertaking weighed heavily, but if their hearts wavered or missed a beat and trembled slightly, their minds and hands did not. "To success and peace," Bill said huskily. "To success and peace," the other two intoned fervently.

Bill arrived back at his room shortly after seven o'clock. To his surprise, Brad Short greeted him. "Hi! I was beginning to think you'd never show up."

"Red! I thought you'd have gone back to your quarters by this time."

The corpsman grinned. "There've been rumors around that something big was happening," he said, "so I thought maybe you'd need me."

"That was nice of you." The last thing Bill wanted was someone who might get underfoot and botch things up at the last minute, but he had to go along with the situation. "Haven't you missed your mess call?" he inquired.

"Oh, that's okay," Red smiled.

"Well, we'll eat together," Bill said. "Has Major Keller been in?"

Brad was about to answer in the negative when the outer door opened and the major walked through. Bill hastened to his side, but the major waved him away. "I'm all right, son. I've been taken care of," he said wearily. Obviously he was fatigued. Bill had never

seen a man so tired. The major walked into his bedroom and sat on the edge of his bed.

Bill followed and said, "Your shots, sir. At least you should have those."

Major Keller slipped off his shoes and lay back on the bed, stretching himself luxuriously. "Thank you, lad, but Colonel Benow and I have been together all afternoon. He examined me and gave me the shots. In view of the strain I've been under, he gave me something to induce sleep as well, so I think I'll just rest for a m . . ." The major's words trailed off into an unintelligible mumble and right in front of Bill's eyes he fell fast asleep. Bill loosened the sleeping man's belt and drew a blanket over him and tiptoed from the room, closing the door. Mustering a cheerful attitude he called in a low voice to Red, "Come on, fella, let's eat." They went to the officers' mess downstairs and Red, impressed by the opportunity, ordered a huge meal. Striving to maintain a casual conversation, Bill ate his food mechanically, his thoughts on the night's work ahead. The presence of this good-natured corpsman could become a problem, but there was no way of dismissing him at this late hour without risking questions.

When they had finished eating, they went upstairs to the major's suite and Bill looked into the main bedroom. Major Keller was in a deep, peaceful sleep. So much to the good, Bill thought as he returned to Brad. He wrote out an authorization for the corpsman to spend the night and handed it to him. "You can sleep in my bed," he told him.

"I couldn't do that," Red protested. "Where would you sack up?"

"Don't worry about me. I'll sleep on the couch in the sitting room. You see," he added, thinking quickly, "I've got a patient, a Colonel Benow, that I have to look in on around midnight, and that way I won't disturb anyone."

Red looked hesitant. "Well, if you're sure it's okay . . ." he began.

"Of course, I'm sure. There now, it's settled."

Although the matter of who slept where was settled, Brad showed no inclination to take advantage of a good night's rest. He had been alone all day and it was not normal for him to maintain a silence that long. He kept up a running conversation, discussing the most trivial things about military life in general and his peculiar lot in particular, until Bill could cheerfully have shot the corpsman. He answered Brad's discourse in polite monosyllables but the strain of watching the clock, and yet not appearing anxious, gave him a splitting headache. Finally, when his watch showed that it was twenty minutes till midnight, he rose. "I hate to break it up," he said, "but I have to make my call now. You go ahead to bed. I have no idea how long the colonel will keep me." He winked confidentially. "You know how colonels are, so don't wait up." The effort of standing up sent a surge of pain to his head. "Wow!" he exclaimed, "I've got the granddaddy of all headaches."

Red shot to his feet. "Stay just where you are, sir," he said with an exaggerated air. "I'll get you an

aspirin and dispose of the ache in a flash." He disappeared into the laboratory and came out a moment later carrying a glass of water and a little white tablet. Bill took it gratefully and swallowed it with a mouthful of water. Brad smiled. "There you are," he said and bowed. "Just come to Dr. Short whenever anything ails you. Service is prompt and prices are moderate. Here," he stuffed the little bottle which had contained the medicine into Bill's trouser pocket, "take a supply with you. You know how colonels are." He gave Bill a broad wink and grinned from ear to ear.

"Thanks," Bill smiled in return. Under any other circumstances he would have enjoyed the clowning of this fun-loving corpsman, but his only thought right now was to get out of the suite without arousing suspicion. "I feel better already," he continued. "I'll go visit the colonel and you go to sleep. I'll see you in the morning."

"Right!" Brad threw a nondescript salute and turned on his heels, entering the bedroom. Bill opened the outer door and stepped out. He cast an anxious glance, making sure that Red was getting ready for bed. "Sleep tight," he breathed as he closed the door behind him.

Bill sauntered down the hall and, as he passed through the main doorway at ground level, he paused and drew a deep breath. At this time of night it would not do to appear too hurried. The important thing was not to give an observer the impression of great haste, nor, at the same time, to move furtively. He

was merely a stroller, out for a breath of air before turning in. He did not head immediately for the spacestrip, but took the path leading to the recreation area, which was kept open all night for the benefit of the swing shift. He continued along this road for several blocks, then turned to his right and made his way to Sentrac's steel entrance. Just as he stepped into the booth, the panel dropped in back of him and the wall in front slid up to reveal Griff Hughes.

"I've been waiting for you," Griff told him in a low voice as he stepped through. "I set the mechanism to manual operation and when you appeared in the approach scanner, I let you in. No chance of slip-up that way."

"You mean there's no record of my having entered this area?" Bill asked, as the two of them walked casually toward the spacestrip.

"Oh, no. Sentrac picked up your identification points. Since you're already in its file, it'll identify you, all right, but before anyone reads the tape, we'll be on Poseida."

"It doesn't make any difference, anyhow; as soon as we blast off everybody in the area will know about it. What's your opinion, Griff? Do you think they'll be able to knock us down once we're airborne?"

"Not a chance," Griff answered confidently. "To begin with, they'll be so surprised when the ship suddenly blasts off, they won't know what's happening. In the few seconds it'll take them to get into action we'll be out of range. The only thing they can do is send up pursuits."

"Well, I'm not worried about that," Bill said with finality.

"Me neither. There isn't a ship made that can catch an XL and I happen to know that the 35 is the only one ready for action. Look," he said, putting his hand on Bill's arm to slow him down, "there she is ahead."

As they stepped into the open, rounding a large hangar, they could see the field lying before them in the dark. All activities had been suspended for the night and the huge area was in darkness except for an occasional circle of light where a lamp stood a lonely watch. One such glowing circle spread dimly around the great ship. The top of the tall launching tower extended above the range of light and disappeared into the inky black of the sky. On the ground, a guard paced back and forth, his figure made tiny by the massive structures of the XL-35 and the tower. "That's Eddie," Griff whispered. "The hookup is completed and all we have to do is board her and take off."

The boys stood in the darkness, looking across the field, their goal in plain sight. Bill's eyes strained to pierce the darkness as he tried to ascertain that there was no one about. A quick dash, a hurried scrambling aboard, and then, if all went well, the first step of the dangerous but vital plan would be accomplished. Griff looked at the luminous dial of his astrowatch. "Thirty seconds to go," he whispered hoarsely. "In thirty seconds, Eddie will move to the boarding ramp and we dash across. Ready?"

"Ready." Bill's lips tightened as he checked off

the seconds. Funny, he thought, just that little strip of darkness separates us from our objective. That little strip of darkness separates us from peace, right now. He gave a sardonic snort as it occurred to him that a strip of mental darkness was all that separated the World Concourse from peace. Then there were only five seconds to go and all thoughts vanished from his mind as he prepared himself for the sprint. His lips formed the words as Griff counted in a barely audible voice. "Five . . . four . . . three . . . two . . . now!"

Chapter 14 *The Missing Pill*

TAKing a deep breath, they flung themselves forward into the blackness. Legs pumping, his arms flailing the air, Griff raced after Bill, who ran with the easy grace of an athlete. Keeping his arms close to his body, Bill stretched his legs in long, loping strides that ate up the ground. As he raced up to the XL-35, Eddie, who had been pacing beneath the structure, turned and ran up the ramp. Bill reached it and jumped up without losing a step, and a few seconds later Griff joined them, breathing heavily. Griff swung into the compartment, looked briefly around and started giving orders, while he seated himself at the main controls. His first action was to switch on the televiewer and scan the surrounding area to see if the boarding of the ship had been noticed. The four screens in front of him gave a continuous 360-degree field, showing the entire spacestrip, surrounded by its hangars and the barracks behind them. Anxiously all three of them peered at the screen, looking for signs of any unusual activity, but all remained quiet and serene, as before. "I guess we're okay so far,"

Bill breathed, "although it sure looks peculiar seeing the whole area as if it were daytime, when we know it's pitch black out there."

"I've got the night switch on," Griff answered, staring intently at one screen and then another. "We're looking at the screen through converted infrared."

"Well, let's get going," Bill said. "Griff, you're the captain. What are your orders?"

"Now let me see. The hatch secured?"

"Secured," Eddie answered him.

"Good. Bill, you check the secondary control panel. All lights should be green. Call out if you see any red ones. Eddie, you hand me the preset data and check me as I feed it into the inboard takeoff robot."

Quickly, efficiently, the boys set about readying the craft for the takeoff. Short, clipped sentences crackled through the compartment as orders and information were relayed. From time to time, the televiewer was inspected carefully. Still no alarm had been raised. The pace quickened as only a few minutes remained before the powerful main units would be switched on and the cry, "Missile away," would sound. Dials, warning lights, gauges were checked and adjusted. Griff was surveying the televiewer for a final check, when he removed his spectacles and, holding them in his hand, pressed the knuckles of his free hand into his eyes.

"What's wrong, Griff? Trouble?" Bill asked quickly.

"No. No trouble. It's just that I have a blinding

headache. It won't interfere with this, though, so don't worry. How's the secondary control?"

"Panel green all round," Bill answered. "Look, if you tell me where the water supply is, I'll give you something for your headache. Might as well be comfortable on this trip."

"Water's piped to each seat. Right here, see?" Griff pressed a button on the arm of his chair and a thin stream of water spurted out and was caught in a small saucerlike basin which had swung out. "Don't worry about me. I get these all the time. It'll go away."

Bill stepped over to the navigation desk and pulled the small phial from his trouser pocket where Red had placed it. He pulled out the stopper and allowed a pill to roll onto the palm of his hand which he held under the light. Under the glare of the direct rays from the lamp, the small white pill caught Bill's eye and froze him into a horrified stare. Quickly he snatched the pellet up and held it close to his eyes, bending to get the full benefit of the light. He examined it anxiously, only to have his worst fears confirmed. The tiny initials *A.S.W.H.* which were molded into the surface of the tablet identified it as antisuss compound, pressed by William Hudson. These were his own antisuss pills! Brad Short must have made a terrible mistake! He had handed Bill the wrong bottle. The idea was too fearful to be quickly grasped. Did it mean that the tablet Bill had swallowed back in his room only a few minutes ago was also an antisuss pill? Hastily he poured the rest

of the pills into his cupped hand and counted them. There were four. He checked to make certain that none remained in the phial, and recounted them. There was no doubt about it now. There were only four pills. One was missing—the one he had taken by mistake. Six had been made, and they had used one in the controlled test.

Bill's head swam with the impact of the dreadful truth. If he remained on board now, the drug would start to take effect. His only chance was to take a suspended-animation pill at once and hope that it would counteract the effect of the drug he had swallowed by mischance. He thought hard as he stared at the four white circles in his palm. To remain on board was certain death. As the drug took hold, he would start to age, slowly at first, then with increased speed, until several hours from this moment he would die of old age! It was horrible. On the other hand, to leave the craft now would mean the abandonment of their plans. He could never hope to make it all the way to his room and back without arousing suspicion, and if Eddie and Griff left without him what would be their reception on Poseida? Would Delu suspect the journey was a trap and that these two unknown Earthlings had been sent to lure him? The answer was clear. Either he himself went with the ship or it didn't leave. En route, he could write a report to Kutt, and therefore to Delu, and explain everything. His body would be mute evidence of his sincerity, and the remaining antisuss pills would be proof of what had happened.

"Bill! Bill! What's the matter, fella?" Eddie's words penetrated the thick blanket of thought which had surrounded him. Quickly he made a decision and snapped alert. He replaced the pills in the phial and looked at his friend with a smile. "Be right with you, Ed. All set?"

"Sure. We're ready to go right now. What happened? You had us worried."

"Nothing happened. I was just thinking, that's all. I'm sorry if I held things up," Bill answered. He did not want his two companions to have to share the awful burden of his decision. Once they were well underway, when there was no turning back, he would explain things to them, but not before then.

"Just thinking!" Griff said in awe. "I'll bet the temperature in this compartment has gone up ten degrees just through sheer brain energy released. Boy, I'd hate for you really to concentrate on something."

"Okay, okay, knock it off," Bill replied good-naturedly. "Let's get going. What's left to be done?"

"Just strap on your magnetic soles, tie yourself into your seats and we're off," Griff said.

The three boys hurriedly followed the instructions. In the XL models, the ship was loaded in the vertical position, but the entire compartment which housed the operating personnel swiveled in all directions. When they had secured themselves to their seats, magnetic soles in place on their shoes, the seats converted into cots and then the entire compartment swiveled to put them in a standing position. They braced themselves and Griff's hand found the main

energizer switch. "I'll want a countdown. Five seconds. Bill, you sound off when I tell you," he said.

The boys faced the televiewer below them and two figures walked into view at the edge of a hangar. They were staring at the ship and one of them raised his hand, pointing in the direction of the XL-35. Obviously their curiosity had been aroused and they started to walk toward the launching tower.

"Now," Griff called out as he swept the big handle to the position marked "Energy Demand." Immediately, the great ship came alive; a faint hum sounded through the compartment and an almost imperceptible vibration coursed through the three boys as Bill called off the seconds: "Five . . . four . . . three . . . two . . . one . . ." Griff slammed the handle to "Takeoff" and Bill, Eddie and Griff gave vent to their emotions in a loud, simultaneous shout of "Missile awa-ay!"

Three pairs of eyes remained glued to the televiewers as the ground fell rapidly away. The force of the acceleration pressed the foot supports against the soles of the occupants and the straps tightened as they took over the burden of keeping the bodies in place. Below them, the boys could see lights suddenly switch on, flooding the entire spacestrip area. The XL-35 was already in the stratosphere, and the square of light was swiftly reduced to the size of a postage stamp, then to a pinpoint of light and finally, as the great craft headed into outer space, all details disappeared and the roundness of Planet Earth glowed like the Moon in the reflected light of the

Sun. Nothing smaller than a continent could be distinguished, and soon even the Earth itself was only a point of light in a sea of stars. Griff relaxed and said, "We did it."

Eddie laughed nervously. "Well, we sure enough took off. That much we sure did." It was his first space flight and everything about it was new to him.

"What countermeasures are they taking?" Bill asked.

"Let's take a look," Griff answered. He switched the televiewer receiver to long-range observation and focused the electronic antenna back along the path they had traveled. Three pursuit ships became visible and the anxiety in the XL-35 became almost a physical thing. Bill felt uneasy and Eddie was painfully alarmed. "I thought you said we could out-distance anything," he remarked.

Griff chortled. Even the obvious danger of hurtling through outer space in an untested craft while being pursued by ships determined to blast them to dust could not dampen his obvious enjoyment at being, at long last, the pilot of a giant spaceship. "Don't let them worry you at all, at all. Remember you are seeing them through long-range observation. They're not half as near to us as you think. Keep an eye on our speed indicator." Bill flashed his gaze to the meter and saw that the long, narrow dial was marked off into sections with numbers running higher from left to right. The needle sliding along the gauge was hovering at the 125 figure. "See that?" Griff remarked. "The indicator is operating at the highest level. Three

different scales pop up as speed increases and we are now getting readings of thousands of miles per second."

"Does that mean we're traveling at 125,000 miles per second?" Eddie asked, impressed.

"That's what it means. Not bad, eh?"

"The scale runs up to 225,000. Can we actually go that fast?"

"No one ever has, as far as we know," Griff returned, "but that's what this ship was designed to do."

Bill asked a question. "Do you know the maximum speed of those pursuits?"

"Offhand, I'd say around 150 to 160, tops. Stripped, that is."

"Fully armed?"

"That'd be difficult to say. Something under the top figure, I'd guess."

Eddie was not satisfied yet. "Then they can go faster than we're traveling right now," he announced, shaking his head, "which means . . ."

"Don't let it worry you," Griff laughed. "Remember we have a headstart and we're not at peak acceleration yet. As we increase our speed, we'll pull away. The televiewer is on fixed focus, which means that no matter how the distance between them and us varies, they will remain on the screen at the same size. So they could be dropping far behind, or catching up with us, and we'd never know it from watching them on the screen. I'll release the fixed focus for a minute and you'll get a relative picture." He pressed a button. The ships on the screen grew slowly smaller.

"You see," Griff said with a chuckle, "we're gaining on them." He switched the televiewer to the collision setting and the screen went blank. If any object appeared in their path or was overtaking them, the screen would flash on immediately and an alarm would ring.

They converted the cots to seats again but remained strapped in them. Bill reached for the pad which was held in place by a spring clip on the wall at his side and said, "If you won't need me for a while, I'd like to write some things down. I'll go over it with you when it's done."

"Go right ahead, m'boy," Griff replied. "We'll still be accelerating for quite a while and all we have to do is check instruments. Eddie can help me with that, so write a book if you'd like."

Bill immediately lost himself in his work, concentrating on what was to be his final experiment. As yet he felt no symptoms, but he knew that shortly the effects would begin and he was anxious to get as much down as possible while he still retained his faculties. He opened with the statement that he was fully aware he was to die within the next few hours and therefore this was the only method available to him to reach Delu with his message. He praised Eddie and Griff, asking Delu to place in them the same confidence he would have felt had Bill been alive.

As he struggled to commit his thoughts to paper, Bill was heedless of the conversation going on between Eddie and Griff as they checked various read-

ings and passed remarks back and forth. Occasionally, he would stop his labors and examine his hands, seeking a sign that advancing age was creeping up on him. When he found no sign, he returned to his writing with renewed vigor. Nearing the end of his manuscript, he began to notice the voices in the background and was a trifle irritated to hear laughter mixing in more frequently. It struck him as unusual that so serious a matter as checking the progress of an unproved ship should cause such hilarity, but he gave no real thought to it.

Bill continued writing furiously, but the peals of laughter and the chatter of the two in charge of the craft interrupted his thoughts and he was about to register a protest when the realization hit him. The antisuss drug was beginning to act on him. Its first effect was on his mind. He was growing older mentally and therefore more serious. He had always been blessed with a good sense of humor, but now the normal high spirits of these two young men were beginning to seem to him like childish antics.

Shutting out this new-found disturbance from his mind, he completed the manuscript but continued to watch his two companions secretly. They would provide a good gauge against which to determine the progress of the drug. It's funny how silly they are, he thought. Of course he realized that he was observing them from an entirely new point of view, but he couldn't help wondering, with a trace of embarrassment, whether he had appeared just as childish to, say, Major Keller. They seemed to be paying no

attention whatsoever to their work and when either cracked the most ridiculous joke, both of them giggled wildly.

Bill felt very depressed, but not only for himself. He knew what a damper his news would be to the spirits of the two boys. At the same time, he could not suppress a sneaking thought that it might be just as well if they became a lot more serious. After all, this was an XL craft and none of them could be sure that some emergency might not take place at any moment. He determined that he would break the news to them and, at the same time, scold them for not being on the alert for danger.

He knew he would sound like an older man to them, but he couldn't help that. After all, he was an older man and they certainly were carrying on in a disgraceful manner. If his report were to reach Poseida, they would have to tone down their highjinks. He cleared his throat. "Fellows," he began.

The two boys interrupted their conversation to face him. Jumpin' Jupiter! Bill thought, but they look young. Did all of us look like children to our superior officers?

"Hey, lookie who's joined us!" Eddie greeted him. "It's Billy boy. Billy, Billy, Silly Billy," he sang and Griff joined in. "Billy, Billy, Silly Billy," they sang and broke into loud, high-pitched laughter.

"Okay, fellows, now you've had your fun," Bill said, "but please remember we're here on a very important mission and . . ."

Eddie cocked his head to one side and there was a

quizzical expression on his face as he stared intently at Bill. "Gee, but you look old!" he said.

"That's what I want to talk to you about," Bill answered. "You see . . ."

"You going to tell us where you've been?" asked Eddie with a sly smile.

"What do you mean?" Bill asked perplexed. None of this made any sense to him.

"You know," Eddie answered, and with a wink at Griff he started singing, "'O where have you been Billy Boy, Billy Boy, O where have you been, charming Billy?'" The two boys sang it over and over again, amid loud, prolonged laughing fits.

Bill looked away in frustration. What could be happening to him to make him see things in this unrealistic light? Eddie and Griff didn't carry on like this. No matter how old he became, he would never have such distorted vision as to see what he was now apparently seeing. There was no doubt that a great change had taken place, but in his present condition Bill saw that he did not have a chance to communicate his thoughts to his friends. He wondered how he appeared to them. Eddie had said he looked old. He held his hands up and examined them; they seemed no different to him and yet, he thought, does a man ever look old to himself? His thoughts flashed back to the guinea pigs who had shown the first reaction to the antisuss drug. They aged, with all the appearance of age. Their skin wrinkled, their hair fell out. He ran his fingers through his hair; as far as he could tell, it was as thick as ever.

Nothing made sense to him any more; he sat back in his chair in defeat. Something was happening to him that he couldn't understand and couldn't do anything about. Then he remembered the polished chrome signaling mirror he carried in his breast pocket and he pulled it out and thrust it in front of his face. There was his own face looking back at him—no change whatsoever that he could see. He studied his appearance carefully. One thing was certain: no drug which he took could have any effect whatsoever on Eddie or Griff. So when they appeared to be getting younger and reverting to childhood, it had to be something happening to him instead, he reasoned. What could be more reasonable than that he was getting older? But it didn't fit. Bill had always been a fair-skinned boy, and the wispy down on his face had never toughened into a beard that needed shaving. Holding the mirror with one hand, he stretched the skin with the other and saw the same golden filaments that belonged there.

His eyes were clear with the brightness of youth and his skin smooth and unwrinkled. As he looked up in puzzlement, he saw Eddie and Griff, still singing and shouting a chorus of "Can she make a cherry pie, Billy Boy, Billy Boy?" They were leaning over in their seats, playing a hilarious game of pattycake. They paid no attention at all to the instruments and even less to Bill. As they swung their hands at each other and babbled their childish song, not caring whether the words made sense, Bill realized that, whatever the explanation, he was perfectly normal and

these two boys were becoming younger with every passing minute.

His eyes took in the control panel and passed over the gauges. The speed-indicator needle was almost at the end of the scale, hovering over the 210 mark, and on the panel red lights were scattered among the green, winking their warning signals. He didn't know how to interpret those warnings and neither Griff nor Eddie had any interest in anything but their childish game, but the acceleration control was plainly marked. It seemed to Bill that the best he could do for the present would be to slow the ship down. This would at least give him a little time to find out what was wrong. Unbuckling his straps, he placed his feet carefully on the steel floor of the cabin and struggled over to the panel. Griff ignored Bill completely as he reached over and moved the acceleration-control lever to the left, centering it about the middle of its track.

He made his way back to his seat again, and, hoisting himself into it, he fastened his straps and leaned back, trying in his mind to find some clue that would enable him to solve the mystery. He noted with satisfaction that the speed indicator was slowly dropping back toward the 200 mark, but wondered what good that would do. For some reason, the effects of the antisuss drug had not begun to show yet, at least not on his body, but, as he sat there concentrating and waiting for nobody knew what, he snorted at the irony of it. Here were the three people on Earth who had devised an active plan to maintain peace

throughout the solar system and they were being impelled through space in a craft which was to all intents out of control. One of the occupants was due to start aging at any time, and the other two were returning to their childhood. Something had to be done, he knew, and his only hope was to win somehow the co-operation of the playful boys.

"Ed! Griff!" he said sharply. "Now listen to me. Pull yourselves together and pay attention." He spoke in a stern voice and with more confidence than he felt. "We've got a job to do and you're going to help!"

Chapter 15 Through the Light Barrier

THE TWO boys stopped their game and looked at him blankly. Bill talked rapidly while he had their attention. "I know you may not understand everything I'm going to say, but I'm in trouble and I need your help. Can I count on you?"

The two boys nodded eagerly, their faces innocent of any trace of understanding. They didn't seem quite sure whether this was a new game or whether Bill wanted them to do something, but at the moment they seemed willing to go along with him.

He explained carefully what he had noticed and that they were apparently reverting to their early youth. He assured them that there was nothing wrong with this in principle but that Griff, in particular, was the only one who could operate the ship and would they both try to be serious and see if they could remember what they were supposed to be doing. He used simple, direct language, and when he had finished he was glad to see that he still had their interest, but he noted with disappointment

that neither boy made a move to get back to work. Patiently he started again, and as he talked an idea formed in his mind.

"Boys," he announced, "we're going to play a game." The control panel with all the pretty lights was going to be the main part of the game. Eddie would point to each light and Griff would have to tell him what it meant. He hoped that if they started on this basis, Griff would remember enough to enable Bill to figure out the rest. "Ready?" he asked and both boys nodded slowly, without moving their eyes from his face. "All right, then, Eddie, you point to any light on the board, and, Griff, you have to tell us what it is."

The two boys looked at each other and then back at Bill. For a minute neither of them moved and then Eddie shrugged and pointed at a light. "That indicates the main braking synchronizer element," Griff sang out.

"What does it do?" Bill asked eagerly, pleased that his idea was working so well.

"Inasmuch as we travel through empty space, merely lowering power would not affect the forward speed. When the main energizer is tapped for decreased speed by means of the acceleration control lever, the braking synchronizer applies a proportionate amount of power contrary to our direction, which has the effect of slowing us down."

"Good! Good!" Bill shouted enthusiastically. "Now, Eddie, you pick out another light."

Eddie pointed a hesitant finger at another one and

Griff called out, "That is the selective transmitter indicator."

"Fine." Bill nodded encouragement. "What does it do?"

Griff's face looked puzzled. "What's gotten into you, boy? Do you want me to go through the entire ship with you?" Bill was nonplused; he was at a loss for words as Eddie chimed in, "He's right, Bill, you've been acting kind of peculiar, you know."

"I've been acting kind of peculiar?" Bill shouted indignantly.

"No offense, old man," Griff replied tolerantly, "but you've been treating us like blithering idiots."

"This pointing to a light and having Griff tell us what it is, does seem kind of childish," Eddie agreed reluctantly.

Bill found his voice. "Do you two have any idea what you great big grownup adult men have been doing?" he inquired vehemently, then answered his own question. "You've been sitting there playing pattycake and singing, 'O where have you been, Billy Boy!'"

"We've been doing that?" Eddie asked, disbelieving.

"I'm afraid that proves it, Bill," Griff said, looking him evenly in the eyes, "there is something definitely wrong with you."

"There is, eh?" Bill snarled. Although he knew his two friends were not responsible for whatever misfortune had occurred, he was exasperated at being

blamed by the two who were the cause of his concern. "Well, take a look at your control panel."

Griff swung his gaze to the panel and started. "Hey!" he shouted, "we're down to 160!"

"No kidding?" Bill remarked innocently. "How do you suppose that happened?"

"Why, the acceleration-control lever has been pushed back!" Griff exclaimed in surprise.

Bill figured things had gone far enough. Eddie and Griff seemed to have re-established normalcy and he related the events of the past while explaining just what had happened. He handed them his manuscript and when they had read it they both looked up and inspected him carefully. "You look okay to me, pal," Eddie said definitely.

"You don't look a minute older to me," Griff agreed.

Eddie concentrated for a minute and then asked, "Do you have any idea what's behind it all?"

"I think I have a clue," Bill answered seriously. "It has to do with the fourth dimension."

"How do you mean?" Griff asked. After all he was the pilot of the craft and if anyone understood its behavior it ought to be he.

"Before I can be certain, I want to make one experiment," Bill answered, "and I'll need your help. I want you to accelerate and build up speed, then as soon as I tell you, I want you to slide the lever back to its present position. Got it?"

"Sure. Shall I accelerate?"

"Just a minute. As we increase our speed, you may

lose your sense of responsibility. It is important that you concentrate hard on what you are to do and no matter how giddy you feel, force yourself to push the lever back when I tell you."

"Well, that doesn't sound hard," Griff remarked, a bit surprised that Bill should make such a big fuss over so simple an operation.

"It may not be so simple when I ask you to decrease our speed, but, if you concentrate hard, I think you'll be able to do it."

"I get you. All set?"

"Let her go," Bill said, keeping a close watch on Griff's actions. Gradually, the needle on the speed indicator moved to the right—170, 180, 190. Griff had his hand on the lever as he watched the needle climb, and a look of vast amusement crossed his features.

Eddie called out, "Hey, Bill, why so serious? Why don't you relax and enjoy the fun?"

"Now! Griff, switch her back," Bill shouted.

Griff's eyes were fastened on the slowly moving needle. "Aw, c'mon, Bill, let's keep her moving; let's see what happens when the needle moves right off the dial."

"Griff!" Bill yelled in near panic as he felt his own determination slipping away, "put that handle back right now, or I'll give you the spanking of your life!" He moved as if to get out of his seat.

"Oh, all right," Griff said disappointedly as he moved the handle back, and half-aloud muttered, "spoil sport."

As the ship reduced speed, Bill relaxed and Griff

released the handle and turned to him. "Well," he said, "how did it go?"

"Just as I thought," Bill breathed, "but you sure had me worried for a minute."

"There was nothing to it," Griff returned modestly. "Now tell us what happened. What's the answer?"

"Yes, Bill, what's been happening?" Eddie joined in.

"We've crashed the light barrier," Bill announced. "As we approach the speed of light, the time element seems to stretch. You're familiar with that effect?" he asked Griff.

"I know of it. Isn't the change so slight as not to be noticeable?"

"At relatively slow speeds, like 160,000 miles per second, it is," Bill agreed, "but the closer we get to the actual speed of light the slower time operates, until at the exact speed of light, 186,284 miles per second, time in effect stands still. Now as far as anyone knows, we are the first people actually to surpass this speed and survive. We know the answer now. We know why the previous XL ships disappeared."

"We do?" Eddie asked blankly. All this was too far out of his line for him to comprehend fully.

"Well, obviously what has happened is that as we passed beyond the speed of light, time started running backward for us. Both of you moved back toward your childhood."

"Well, bless my boosters!" Eddie exclaimed in amazement, "but what happened to you? Didn't you get younger with us?"

"No. Not the first time. As a matter of fact, if we had

not crashed through the barrier, I'd be in awful shape right now, because apparently as fast as age was being added to me by the antisuss drug I took accidentally, it was being taken away by the time element. It saved my life."

"Wait till they hear about this back home!" Griff said. "We'll be heroes!"

"Aren't you overlooking a couple of details?" Eddie asked glumly. "Small little things like being absent without leave, swiping a top-secret spaceship and consorting with the enemy? Some heroes!"

"I resent that," Griff said in mock indignation. "We didn't exactly swipe the ship. We merely borrowed it, and as for consorting with the enemy, if they didn't steal these ships, and we can prove they didn't, they aren't even the enemy."

"All right, knock it off, fellas," Bill broke up the argument good-naturedly. "Heroes or villains, what's the difference? Our job isn't over until we get Delu back to Earth with us. Griff, do you know the Poseidan wave length?"

"You're talking to a communications man," Griff answered with his accustomed brashness. "I can put you on to Headquarters direct." Twirling his dials, and setting his frequency selectors to the proper microwave, Griff soon had Bill talking with Poseidan Headquarters. His message was being received with considerable suspicion so he asked to be cleared directly to Kutt. This was a most unusual request, and the communications clerk at Poseidan Headquarters was deeply puzzled at this message from an approach-

ing Earth ship. However, the son of Delu was not a personage to be trifled with and, after a momentary hesitation, the connection was made. Bill asked Griff to cut the televiewer in on the conversation and Kutt's image appeared on the screen.

"Hi, Kutt," Bill greeted him. "I'm glad I was able to get through. I'm in an XL model with two of my friends—Eddie is one of them—and I'm approaching Poseida on a course which will bring me in about two hours from now. I need your help urgently."

"Well, of course, Bill, you can count on me." Kutt's voice came through clearly and the puzzlement was accurately registered. "What are you doing coming here? I don't understand."

Bill hastily outlined in a general way the events that had brought him back to Poseida, without mentioning the declaration of war or any of the actual details. He did, however, mention the bare fact that he carried proof that the Poseidans had not been responsible for the tragic disappearance of the XL models. He asked Kutt where the ship could be brought down other than in the regular Earth Colony military strip, and Kutt suggested the beach which they had enjoyed together. A portable landing beam would be dispatched to the site immediately, Kutt assured Bill, and all he would have to do was set his robot landing mechanism to the proper frequencies and the craft would bring itself in. Bill checked this with Griff and was relieved to see his pilot nod his head in agreement. "That sounds good, Kutt," Bill said, "but there's one more thing. We're going to have

to take off again right after I talk with you and your father. Can that be arranged right at the beach?"

"It can be handled," Kutt assured him. "We've been faced with worse problems. Just you get here safely and I'll see to it that our engineers have an auxiliary takeoff tower ready for you."

"Thanks. It will be urgent that I see your father right away. Please arrange a meeting if you can. I repeat, it is urgent," Bill concluded.

"I'll do what I can, Bill. Be seeing you." With that Kutt concluded his transmission and Bill turned to his two friends.

"Can you handle the landing robot?" Bill asked Griff.

"It's automatic," Griff replied laconically. "If they set up a landing beam, all we have to do is sit tight and ride her down."

As the trip neared its end, Bill became increasingly anxious. The plan was a three-phase operation and the success of all three was required if any good was to come of it. The commandeering of the ship and the safe arrival on Poseida was phase one. Now that the interview with Delu, which was the second step, was almost at hand, Bill wondered how the Poseidan Leader would receive the proposition of a trip back to Earth.

The televiewer screen suddenly flashed on and Griff closed the circuit activating the robot landing mechanism. He settled back in his seat and said, "Check your belts and relax; we're due to go into landing procedure shortly."

Eddie and Bill tightened all straps and waited. As a bell sounded, the seats converted into cots and the great ship reversed its direction and pointed its tail to Poseida. Its motive energy geared itself to counteracting neatly the pull of gravity, and the XL-35 settled gently on Poseidan soil. The compartment swiveled to a horizontal position and, as the cots reconverted, a loud clang announced the switching off of the main power unit.

The three boys unstrapped themselves and stood up, briefly straightening out their clothing. Then Griff stood by the hatch release and Eddie stood back to allow Bill to be the first one out. Bill nodded and Griff pulled the lever; the hatch swung open and Bill stepped forward to see that a ramp had been placed in position outside. He walked onto the ramp and paused, allowing his eyes to rove around the scene. He had never seen so many Poseidans. Gathered in formation, they ranged completely around the ship, covering the entire beach and stretching into the ocean. Strange weapons of several different kinds were in evidence, and a quick glance at the mass-energy transmitter showed that its lattice-work superstructure was in motion. It was obvious that the Poseidans were mobilized and ready.

Kutt was waiting at the bottom of the steep ramp and Bill hurried toward him as Eddie and Griff followed. "Boy, I'm glad *you're* here," Bill said. "I'd hate to face this reception committee alone."

"Father didn't want to take any chances. Are there just the three of you?"

"That's all. Kutt, I'd like you to meet Eddie Watkins and this is Griff Hughes. He was the pilot this trip."

"Pleased to meet you, Eddie," Kutt acknowledged the introduction. "Bill spoke of you often. I'm pleased to meet you, too," he said to Griff. The two murmured a polite greeting and Kutt turned at once to Bill. "Father's waiting for you. He asked me to bring you to him at once."

Bill was pleased at the news. "Fine," he said, "we have very little time and we must speak to him right away. Eddie and Griff are with me on this; he'll see the three of us, won't he?"

"Oh, yes. Let's get over there immediately."

They rode on open-surface traction vehicles, and Kutt was able to tell Bill in guarded tones that he had told his father all about his talks with Bill and therefore he had no need to hold anything back. This information relieved him greatly; it would save a lot of time.

Delu received them in the Hall of the Universe; he greeted Bill cordially, if a bit coolly, and barely acknowledged the presence of his two companions. Delu then dismissed the others in the chamber and when the three boys were alone with Delu and Kutt, Delu spoke. "This is an extraordinary thing you do, coming here like this."

"These are extraordinary times, sir. It was the only thing I could do."

"Are you here under orders?"

"No, sir, you see . . ." Bill's eyes lowered and he looked uncomfortable. "We . . . well, we sort of

borrowed a ship. General DeVere will no doubt declare us all under arrest, but before you turn us over to him, sir . . ."

"General DeVere and his staff are confined in a section of the Palace as, shall we say, guests of mine. He will not be declaring anybody under arrest for the time being. Now, young man, if as you say you are not here under orders, what is the purpose of your visit?" This was bad news. Delu must know most of what had been happening on Earth, and, if General DeVere had been taken into custody, it would appear that Delu had some plans of his own afoot.

"Sir, as you know," he began, "things have been getting pretty bad and, well . . ." He hesitated, not knowing quite where to begin. Suddenly Eddie stepped forward. "General Delu," he said, "I think if you'll read this, you'll understand." He handed Delu the manuscript which Bill had written when he had believed he was going to die. Bill looked at Eddie in protest, but it was too late; Delu was already going through the document at a rapid pace. The silence was broken only by the rustling of pages as Delu neatly flipped them over one by one.

He came to the end and looked up. "May I inquire how you come to be here, since according to this writing you did not expect to survive the trip?"

Bill explained how the very thing which he had expected would be the end of him had been the key to the survival of the trio and the discovery of the light barrier.

"This is fantastic," Delu murmured. "It's incredible."

"It's incredible, all right," Griff announced loudly, "but it's all true. Right out there on the beach is an XL ship. First one ever to make a successful flight, and I would like to say that I am proud to have been accorded the privilege of being the pilot." Bill groaned inwardly. Was there no situation, he wondered, that could dilute Griff's brash enthusiasm?

"I did not intend to imply that there was any lack of truth," Delu said. "I am convinced that your purpose in coming here, gentlemen, was an honest one. Frankly, Bill, once I had determined that you came entirely on your own responsibility, there was no doubt in my mind. But what you ask is impossible."

Chapter 16 *A Verdict of Treason*

Sir, things that seem impossible normally become not only possible but mandatory when thousands of lives are at stake," pleaded Bill.

Delu chose his words carefully. He liked this young Earthman and recognized the risks the three boys had taken to appear before him, but he could not allow himself to be influenced by personal feelings.

"There is nothing I would not do to preserve the life and safety of even one man, if it were in my power to do so. But I am charged with protecting the lives and the freedom of my people, and if I wavered in the performance of my duty, I would be placing them in a position of great peril. Although my decision weighs heavily on my conscience, I can have no choice but to take such steps as I feel necessary for the protection of my people."

Bill swallowed hard. Time was running out and it could not be wasted in a lengthy debate. He had to convince Delu that the trip back to Earth would not imperil his people but would, instead, be the means of sparing the lives of thousands of them, for, regard-

less of the outcome of the impending struggle, the slaughter on both sides would be devastating. He marshaled his thoughts, cleared his throat and began. "Don't you see, sir, the surest protection you could give your people is the weapon of truth. If you lead them into a war, even a defensive war, which could be avoided by the realization of the truth, you would be as guilty as Proctor Glussan." He went on to explain that since war was what Glussan obviously wanted, the outbreak of hostilities would be a victory for him. The people of Earth were as anxious to preserve the peace as were the Poseidans. Only a handful of men were fomenting this turmoil by hiding truth beneath a barrage of misleading words. To attempt to settle the differences by force of arms would prove nothing, but would merely bury the truth still deeper. Bill did not ask Delu to disband his forces but to hold them in abeyance while he went to the World Concourse and spoke out for peace. If things did not work out well, then, of course, he would have lost nothing, but at least he would have held nothing back and he could not feel responsible for the carnage to follow. No matter what occurred later, Bill assured him, his appearance there and his speech would show Glussan up for what he really was, and real peace, founded on truth, would settle again on the universe.

Bill finished talking and waited. Delu had listened intently throughout the discourse but it was impossible to tell whether he was being influenced by what was said. Delu waited a minute in agonizing

silence and then spoke in a low voice, as if thinking aloud. "I could, as you put it, show Proctor Glussan up for what he really is. I could show him up more than you realize."

"I have no doubt of it, sir," Bill answered sincerely.

"You may like to know," Delu continued, "that a few hours ago, a disgraceful plot was uncovered which involved Proctor Glussan and, I am sorry to say, several of my own people. It seems that the sly Proctor has been smuggling rhyllium from this planet back to Earth in heavy quantity."

"I don't understand, sir," Bill said in surprise. "The possession of rhyllium is strictly controlled back home. Its existence must be immediately declared and the Government buys it at once. No individual may retain rhyllium. And yet I happen to know that the Government stockpile has not been swollen by the receipt of shipments other than the normal amounts."

"Exactly!" Delu replied emphatically. "Proctor Glussan has been building his own private stockpile against the time that your people will be so desperate that his hoard will buy him anything he desires, which will turn out to be, I'm afraid, control of the entire planet."

"No kidding!" Griff exclaimed indignantly. "Well, that clinches it!"

"There's no doubt about it, General," Eddie joined in. "Once you tell them that, he's through."

"Hmm," Delu mused, "I'm not so sure. He's a crafty one."

"You can't hold back now, sir," Bill pleaded. He

saw Delu was wavering and he pressed his advantage. "When you show them how Glussan has been double-crossing his own people and then point out how the ships were destroyed by passing through the light barrier, there isn't a chance of failure."

"When you are dealing with a person like Proctor Glussan and two such complex peoples as yours and mine are involved, failure lurks at every move," Delu cautioned. He turned to Griff. "Do you believe that your ship can safely make the journey back to Earth?"

"If it doesn't, I'll carry you the rest of the way on my back," the messenger replied with conviction and, in spite of himself, Bill grinned.

"Lieutenant Watkins," Delu turned to Eddie, "as an expert on affairs of the military, what would you say our chances of arriving safely would be? Will we be blasted from the skies as we approach your planet?" Eddie shifted uncomfortably. Delu was joshing him, he knew, but he had to give an answer.

"Well, General," he replied, "it seems to me that if the only XL ship ever to have survived a flight were returning to its base, I would not destroy it. I would be most anxious, in fact, to assure its safe landing."

"In any case," Bill broke in, "we would establish communication with the base and inform them of our arrival."

"If I should decide to go," Delu resumed, "how soon could you be ready?"

"Why, we're ready right now, sir," Bill answered enthusiastically. "We could leave at once. And I believe we should."

"All right, then, I agree. First of all I shall have to have a travel cabin placed aboard; I will take Kutt and three attendants. We'll wear water-filled land-suits, of course, but I would like to take the cabin also. Can that be arranged?"

"The hold of the XL can take something half the size of this room," Griff exaggerated, "so have your people bring the cabin out on a hoist and we'll place it aboard."

"I'll be ready within the hour," Delu announced, bringing the conference to a close. "You can get everything in readiness meanwhile."

As Bill thanked him and turned to leave, Kutt came up and said, "Phew, I never thought you'd be able to talk him into it. I'm kind of scared, but I'm real happy."

"I am too," Bill smiled. "Thanks for your help. We'll see you at the ship."

The three boys returned to the XL-35 and fell to work with a will. A self-propelled hoist arrived with the Poseidan travel cabin and an auxiliary takeoff tower was wheeled into place. Griff went over the control panels with infinite care while Bill and Eddie directed the loading of the hold and the fitting of connections to the tower. They had just completed their work when Delu arrived with Kutt and three aides. The Poseidans were covered by a flexible material which allowed them to move about with almost normal action but which kept them immersed in a special water-base solution. Their voices came through clearly as the three boys waved a greeting

from the hatchway. "Are you ready for the blastoff?" Delu asked, coming to the top of the ramp.

"All ready, sir," Bill assured him, standing aside to let him come through. The travel cabin had been anchored in the hold, and an extension aisle had been brought out and joined to the door leading into the main compartment. Delu looked around briefly and said, "Looks efficient. We'll go into our cabin for the blastoff and we'll join you later."

"Fine, sir," Bill remarked. "We have a communications line rigged up so you can keep in touch with us at all times."

With that the five Poseidans scrambled through the door and settled in their cabin. Eddie closed the passageway and then swung the main hatch to. The boys climbed into their seats and tightened the straps. Griff checked his instruments and turned to Eddie and Bill. "All set?" he inquired.

"Hold it a minute," Bill said. "Can you put me on to Delu over the intercom?" Griff flipped a switch. "Sir," Bill called out.

"Yes, Bill, what is it?" Delu's voice filled the compartment.

"I was just wondering, sir, do you think we should contact Earth and tell them we are coming?"

"No. I'd rather put that off until after we are spaceborne; let's not give them too much time to think. Get us started and I'll be in to see you."

"Right, sir," Bill called; and then to Griff, "Let's jump."

The televiewer showed the ground around them

had been cleared of all Poseidans. Griff completed a last-second check and, grasping the main energizer switch, he asked for a countdown. As Bill sounded the seconds, the boys involuntarily braced themselves, their muscles tuned to the energy surging through the ship. Then the triumphant cry of "Missile away!" came from three throats and the trip to Earth was begun.

Bill watched Poseida receding swiftly on the screen and was amazed to see it reduce to the size of Earth's moon and with a startling abruptness disappear. At first he thought something had gone wrong with the receiver, till he remembered that Poseida's ionosphere did not allow reflecting light rays to penetrate, so as soon as the craft had passed through the enveloping layer, the planet's very existence could not be detected.

As soon as they were truly spaceborne, Griff announced the fact and Eddie got down from his seat, relying on his magnetic soles to maintain his equilibrium. He opened the door leading into the hold and the boys waited. Delu and Kutt soon appeared, the aides remaining in the cabin. Bill noted that the spacesuits the Poseidans were wearing had tight cuffs which allowed the tips of their long arms to emerge. This made handling things easy as well as providing a way to anchor themselves to any surface by means of their suction pads. Griff made certain their speed was maintained well below the danger point and Delu was extremely interested in the numerous dials and instruments.

At about the halfway point, Delu asked Griff to establish contact with Headquarters on Earth. The three boys winced. This was the part which they had not been looking forward to. Bill felt that regardless of how Delu was received, the three of them were in for a rough time.

At Delu's instructions, the televiewer screen was not activated and they could hear the call being switched to Military Headquarters. There was a pause before the voice of General Watkins came on. There was controlled fury in his speech. "Identify yourself at once," he said. Griff gulped and said, "This is Griff Hughes, Courier Service, Messenger, sir."

"Are you in the XL-35?" the loudspeaker boomed.

"Yes, sir."

"Who's the pilot?"

"I am, sir," Griff answered, sounding very unhappy about it for once.

"What!"

"Yes, sir."

"Is Edward with you?" the general asked.

"I'm here, Dad," Eddie called out.

"Are you a prisoner, son? Did they kidnap you?"

"No, Dad, I was responsible for taking the ship."

"You were!" Spluttering sounds came through the loudspeaker as General Watkins strove to control his fury, and Eddie thought this was a good time to change the subject. "We have a passenger, Dad. Delu is on board. He would like to talk to you."

"Delu!" The general's voice echoed his amazement.

"Good day, General, this is Delu of Poseida. I am

talking to you from the XL-35 now operating in the service of Planet Earth Forces. I request permission to land at the Headquarters Experimental Spacestrip."

The general's voice softened and a note of respect sounded. "Delu. This is a pleasure, I'm sure. But I'm afraid I don't understand, sir. The XL-35 is not in the service of Planet Earth Forces at this time. The situation here is very confused. I have been trying to contact General DeVere and so far I have not been able to get through." There was a pause and the general continued hesitantly, "... Er, Delu, do you come in peace?"

"Of course, General. I expect my arrival to be peaceful. Why do you ask?"

"Well . . ." General Watkins was embarrassed by the question. "As I say, the situation is very confused . . . and . . . er . . ."

"I understand the situation perfectly, General," Delu continued smoothly. "I presume that the Staff Chiefs are with you and are listening to our conversation?"

"As a matter of fact, they are."

"Good. Then I want you all to listen. I come in peace to address the World Concourse. As proof of my intentions I bring with me my son Kutt, and I expect to be received with full protocol and taken at once to the Concourse where I will speak. Is that agreeable?" The speaker went dead and there was a hurried conference at Military Headquarters, then there was a click and the general answered, "It is agreed, Delu. We shall be happy to welcome you, and

we hereby invite you to address a full meeting of the World Concourse immediately upon your arrival."

"Thank you," Delu said, "and one thing more, General. Inasmuch as you have so cordially extended me an invitation, I am sure you will not construe it as a threat when I tell you that my safe conduct is guaranteed by Poseidan Military Forces. I merely mention it to make it clear that, although my life may be sacrificed, total and immediate destruction of your planet will be the result."

"Of course, Delu, although I'm not sure I follow . . ."

"I think we understand each other, General," Delu answered simply. "Now there will be no further communications from this craft until we land. You will arrange for the robot landing beam?"

"It will be taken care of," the general replied.

"Good. I sign off." Delu motioned to Griff to cut the transmitter. He spoke to the boys. "I think it has gone very well so far. You have a good man for a father, Edward. I hope the Concourse will hear me out. Now, I shall return to my cabin and prepare my speech. Let me know when we enter your stratosphere." He turned and went through the door. Kutt followed him, but just before passing through he turned to face the three boys and said, "Oh, boy. We're goin' for a touchdown." Then he disappeared down the aisle.

When they arrived within range, Griff activated the robot landing mechanism and notified Delu. Eddie closed the connecting door and the landing was effected in a routine manner. The main power unit

switched off and the boys jumped from their seats. They opened the door to the hold and Delu came through, followed by Kutt and the aides. The compartment was quite crowded, but the Poseidans would be the first ones off. The aides took up their position right at the main hatchway with Kutt behind them and Delu at the rear. When all were in position, Bill nodded and Griff, standing to one side, pressed the hutton, opening the big hatch.

The aides moved out and, when they were halfway down the ramp, Kutt followed. Delu paused a moment and started through the door. As soon as he made his appearance, a military band broke into an anthem of greeting while the massed honor guards snapped to attention. Peeking surreptitiously through the crack by the hinge of the open door, Eddie could see his father waiting to greet Delu. High officers were present and they saluted Delu and led him on a short review of the guard. The party of General Officers and Poseidans then boarded vehicles for a fast trip to the Concourse Building.

As soon as they had disappeared, a group of space police ran up the ramp and entered the XL-35. The officer in charge of the squad asked each boy to identify himself and then said, "You are each of you under arrest, charged as being guilty of maximum treason to the direct benefit of the enemy; unauthorized operation of security equipment in time of peril; being absent without leave and various lesser charges which will be made known to you later." The boys submitted meekly and they were escorted out

of the great craft and herded onto a police vehicle which took them to the military stockade. There they were placed in the maximum-security wing in which they were the only occupants. It was evident that the officer in whose charge they were, regarded them with utmost contempt; when they were locked in the compound he gave them a dressing down, his voice dripping with scorn. "If it were up to me," he concluded, "you would be executed out of hand. You," he indicated Bill, "having wormed your way into General Watkins' confidence, used his kindness against him. And you," he turned to Griff, "a messenger who was given a position of trust, took advantage of that trust to sell out your people. As for you," he looked at Eddie with loathing, "there is nothing I can say to express my hatred of a fellow officer who betrays his oath."

"A lot you know," Griff spoke up boldly. "We didn't betray nothin' to nobody."

"Hal" snorted the officer. "Well, at least we know what's been happening to the XL's. What made you bring this one back? Did Delu put you up to it?"

"You mean you think we have been taking the XL's?" Eddie asked in dismay.

"You or your Poseidan masters," the officer snarled. "What's the difference?"

"Now look here," Bill said, losing his patience, "aren't you sort of putting the cart before the horse? You are doing your duty by keeping us in custody, but what right have you to assume we are guilty of anything before we are tried? I am sure that when

all the facts are brought out at our trial, the only charges which will stand up will be the minor ones for which we are quite ready to answer."

"You traitors have had your trial," the officer returned. "You have all been found guilty and sentenced to be executed."

"We've had no trial," Bill answered angrily. "What do you mean we've been found guilty and been sentenced?"

"You were tried in absentia and found guilty. Your father tried to delay the trial, arguing that he thought you might have been forced along," the officer said to Eddie. "When the Sentrac tapes indicated that you had introduced your co-conspirator to the area, he was voted down and the court-martial was held. It is perfectly legal to pass judgment on traitors who have fled beyond the jurisdiction of homeland. We never thought we would be able to carry out the sentence, but you played right into our hands, and it will be my pleasure to take you to the execution chamber in about four hours. If you take my advice, you will spend your remaining time writing a full confession as a warning to others." The boys looked at him, speechless with horror; he surveyed their dismay with satisfaction and then turned on his heel and marched swiftly out of the compound.

Chapter 17 *A Post on Poseida*

THE BOYS looked at each other in consternation. "Can they really do that?" Griff asked.

"I don't know much about law," Bill said, "but it certainly seems unfair to me."

"Military justice can be an awful thing," Eddie said. "I've had to study the procedure of courts-martial and, although I don't remember much about it, I know I was surprised how differently they operated from civilian courts. But this in absentia business takes the cake."

"How can they say we're guilty of anything until they speak to us personally?" Griff asked, his voice rising almost to a wail.

"I've heard of something of the sort," Bill said, "and the idea was that you tried the person if you couldn't get hold of him. This was so that if you ever did locate him, you could extradite on the grounds that he was a criminal. I always assumed that if they did catch up with a guy, they'd sort of try him over again."

"Do you really think they're going to clobber us?" Griff asked Eddie.

"Who knows?" Eddie answered with a shrug. "In any case it won't do any good to worry about it. I wonder how Delu is making out."

"Hah!" Griff snorted. "If I know them, they've probably arrested him and cut him to pieces."

"They wouldn't do that," Eddie said in a shocked tone, "would they, Bill?"

"No, I don't think they'll do him any harm. After all, he was invited to speak, and they'll listen."

"Yeah, they'll listen to him," Griff agreed disgustedly, "and you know why? Because he told them that stuff about Poseidan Military Forces. If we told them, 'now you listen to us or we'll destroy all of you,' they'd listen you can bet."

Bill forced a smile. "Why didn't you tell the officer of the guard that?" he asked.

"Aw, I mean, if they thought we really could. In Delu's case, they aren't sure whether he can or not."

"I know what you mean," Bill replied, "but it won't do any good to be bitter. We took on a job and we're stuck with the consequences. If our plan works and Delu is able to persuade them to avoid bloodshed, whatever happens to us doesn't matter too much."

"I suppose not," Griff admitted grudgingly.

The next few hours the boys tried to avoid the subject of their impending doom. They chatted among themselves, discussing every topic they could think of, from the possibility of the antisuss drug being developed as a specific for travel at extreme

speeds to the conjecture as to how soon travel outside Earth's universe would become feasible. They were lying on the hard bunks fastened to one wall, looking up at the ceiling or closing their eyes as they talked, when footsteps rang through the long hall leading to their compound. The hollow, echoing sounds became louder, and as one the trio sprang to their feet and rushed to the bars, pressing against the steel as they tried to see who was approaching.

A sergeant of the guard came into view and stopped outside their enclosure. "Watkins, Hughes and Hudson, come with me," he said shortly as he unlocked the barred door and held it open.

The boys glanced apprehensively at each other before Bill stepped forward and led the way. They followed the sergeant down the hall and turned into the provost marshal's office. The office was large; it had benches along two of its walls, and at the far end a long, broad desk overlooked the entire room. In the area behind the desk, a group of staff officers was gathered, and seated at the desk itself was General Watkins. Shoulder to shoulder, the three boys stood at attention, facing the general. "I have been instructed by the World Concourse to inform you that a resolution has just been passed expressing recognition of your accomplishment," he said.

There was silence while he paused and it was broken by Griff. "Well, that's real nice, General. I suppose they'll send flowers to the funeral." Bill moved his fingers over and surreptitiously tugged

at the messenger's trousers, trying to pass along the hint to keep his mouth shut. The general's eyes crinkled at the corners but his face remained solemn; he cleared his throat. "Hmm," he said, "I see what you mean; but I wonder if any of you realizes just what you did. Overlooking the major offenses, any one of which would be sufficient to warrant summary execution, you collectively committed breaches of military law, civil law and various transgressions against the Communications Act, the penalties for which add up, I believe, to approximately a thousand years at hard labor. None of you denies responsibility, I take it?"

"No, sir," Eddie answered. "None of us."

"Good. There are channels of procedure all carefully laid out for action in the public interest and I strongly recommend that you confine your activities to these channels in the future. However, in this particular case, we have just heard a truly remarkable speech by Delu which seems to point to extenuating circumstances. As a result a special Act was voted declaring your sentence void and negating the charges against you." He stood up and came around the desk. "Bill," he said, shaking the boy's hand, "I can only say that I wish I could have had a part in it. I'll talk to you later; you're going to have dinner with us tonight." He moved along to Griff and grasped his hand. "Young man, I congratulate you. Your extraordinary if somewhat reckless courage was vital to the success of the undertaking. You will dine with us?" Griff nodded eagerly. "Good. I have a feeling

that you'll be hearing from Experimental Pilot and Navigation Training Command. They'll have a special job for you."

Griff lowered his eyes modestly. "I'll be glad to give them whatever help I can," he murmured.

General Watkins stood in front of his son and extended his hand. Eddie took it and they stood silent for a moment. The general's eyes were moist as he pressed Eddie's hand. "Son, I'm proud of you," he said huskily. Then he returned to the desk and busied himself gathering up the papers as the Staff Chiefs approached the boys and, introducing themselves to each lad in turn, offered their personal congratulations.

The general and his staff headed for the exit, but he paused at the door and said, "Don't forget, my place for dinner. Six o'clock. I have to be getting back to Headquarters but there's someone been waiting to see you. I'll send him in." He disappeared with his staff and Kutt came into the room. The boys crowded around him excitedly, asking questions and he laughed as he said, "Hold on. There's so much to tell I couldn't possibly explain everything that happened."

"Couldn't you just give us the highlights?" Griff asked.

"Ed, your father invited me to stay at his place for a few days. Father is returning home at once but he gave me permission, so I'll be able to tell you everything that went on when we're together."

"What about Proctor Glussan?" Bill persisted.

"Oh, he's arrested and stripped of his office. He

won't cause any trouble ever again. It was amusing to see how, once he'd been exposed, his supporters scrambled all over themselves to be the first to denounce him and swear that they had never trusted him."

"That's the best news I've ever heard," Bill said, smiling broadly. "Then everything turned out all right?"

"Everything," Kutt answered. "Father was in great style. He even told them all about the mass-energy transmitter and promised to share its secret now that we are to work as a team. And he proposed a joint venture to explore the outer reaches and investigate the near galaxies. They went wild; boy, I wish you could have seen it. I'll tell you all about it this evening, but I have to run along now. I have to see Father off at the spacestrip."

"Hey, wait a minute," Eddie pleaded. "Did Dad make a speech? Did he say anything?"

"Yes," Griff joined in. "What about when your old ma . . . I mean Delu told about Glussan and his rhyllium, what did they do? Did they jump right up and . . ."

"Fellows, fellows," Kutt laughed. "I'll miss the ceremonies at the strip, if I don't leave, and Father is a stickler for protocol, you know. I'll just tell you about a couple of things I heard and the rest will really have to wait."

"That sounds fair enough," Bill smiled. "What's the news?"

"Well, to begin with, Major Keller put in a bid for

your services. He says your place is on Poseida; that you should continue your studies in the lab there, so you're going to be offered a post if you want it."

"Do it!" Bill exclaimed. "I'd take it at half pay."

"You're part of this, too, Ed. Father mentioned the need for intelligent young liaison officers and he expressed a wish to have you stationed on Poseida to handle liaison work. Subject to your approval, of course."

"I approve," Eddie returned gaily. "I most heartily and emphatically approve. Boy, oh, boy, do I approve."

Now that the tension was wearing off and the boys faced a carefree future where they could pursue their individual callings normally, the solemnity and apprehension of the past several days gave way to good humor and boisterous high spirits. "And Griff," Kutt went on, "General Watkins was talking to Colonel Cummins of the Experimental Pilot and . . ."

"Yes, I know," Griff interrupted him. "I'm to take charge of the Pilot and Navigation Command."

"Take charge?" Bill and Eddie shouted in mock indignation. "That ain't the way we heard it!" They tussled with the young messenger and pummeled him until he squealed for mercy. "All right, fellas, all right," he gasped, "so I'll push a broom. What's the dif. I'll still be in the pilot end of things."

Kutt put an end to the caper by insisting on leaving. Griff asked if he could go along. He was about to hint that he would be useful in case anything went wrong with the blastoff and they needed expert advice, but

he caught the eyes of Bill and Eddie focusing on him in pretended ferocity and changed his mind. "I love the excitement of the blastoff," he ended.

"Sure, come on," Kutt said, "but we'll have to hurry. So long, fellows, see you in a little while." Bill and Eddie waved good-by and watched them leave.

When they were alone, Bill turned to his friend and said, "Boy, that was some meal! I've never had a dinner which affected me so much."

"What meal?" Eddie asked, surprised.

"Dinner at your house last Christmas, don't you remember?" Bill replied. "That's what started this whole business. I've had indigestion ever since."

The boys laughed until tears streamed from their eyes. When they regained control, they started at a brisk pace for General Watkins' quarters. They were going to have another meal together.